THE ART OF

Disney·PIXAR Cars 3

FOREWORD BY **JOHN LASSETER** • PREFACE BY **BRIAN FEE** • INTRODUCTION BY **BILL CONE** AND **JAY SHUSTER**

4.

BRENT MUSTANGBURGER (V.O.)
...oh no! We've got one car! Now
more! A huge crash!

BANG. CRASH. The row just behind Storm (who is clear of everything, still in the lead) gets caught up in the skidding, braking carnage.

Cruz and McQueen's attention shifts from each other to what's up ahead of them. Gray smoke already shrouding the track.

DARRELL CARTRIP (V.O.)
Who's gonna get through??!!

The two of them have no choice but to dive into the smoke.

SHIFT POV TO THE FINAL STRETCH LOOKING BACK TOWARD THE SMOKE...

...and for a split second of slow motion, we wait. Until Cruz punches through (at full speed), untouched, somehow avoiding the mess.

BRENT MUSTANGBURGER (V.O.)
Ramirez is clear!

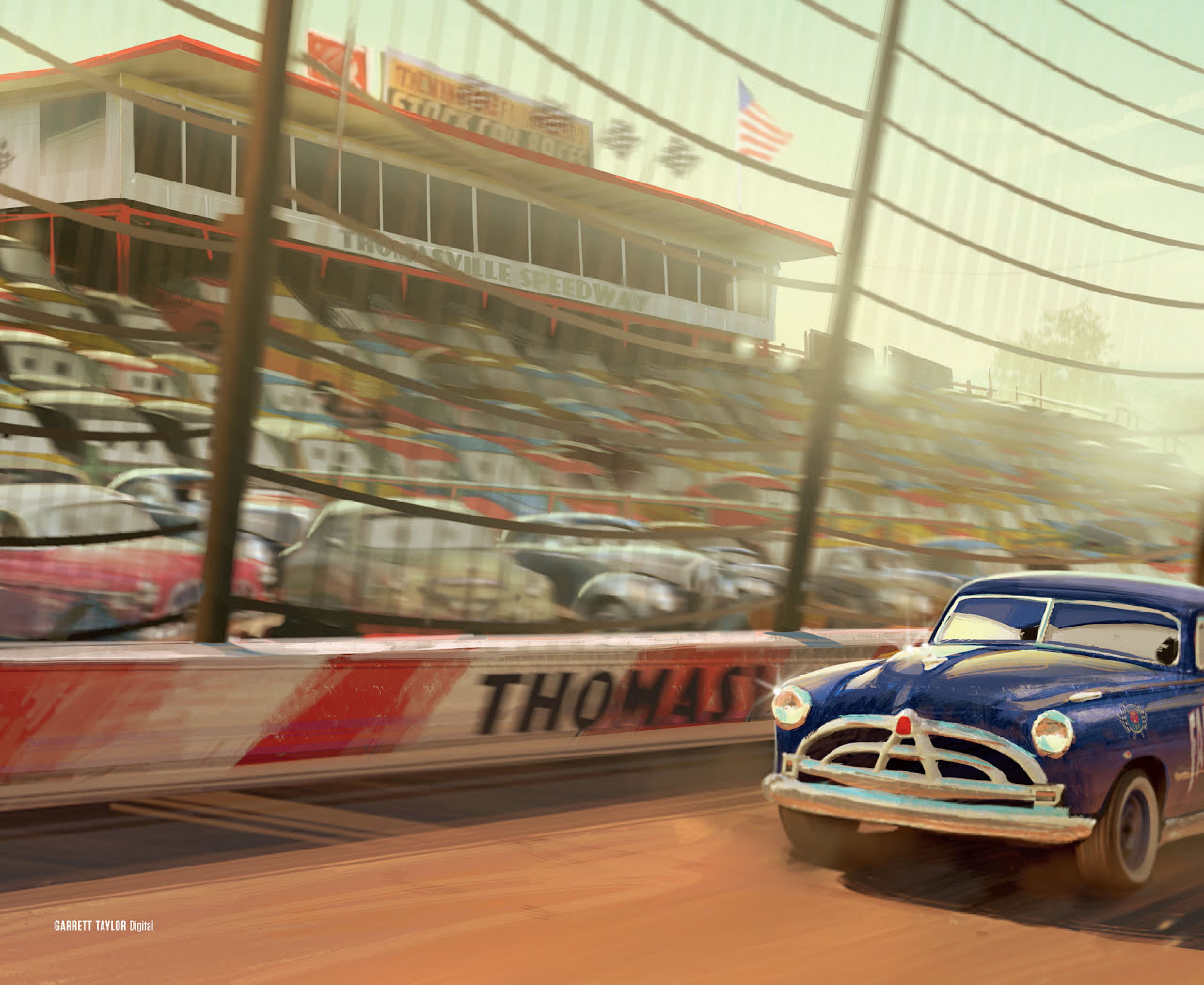
But the very second McQueen emerges, he gets clipped on his right front quarter by another spinning racer. Not bad, but enough to slow him down.

DARRELL CARTRIP (V.O.)
...oh, but Lightning takes a shot!
And with only a few laps to go!

CUT TO:

Confidential- Property of Disney/Pixar

smoke
McQ + C
smoke hits cam.
they saw
into smoke
wheel at cars still in motion
Cruz through
McQ must car heads toward him
when McQ gets tagged
he's not at or to quit
Bent up.
wins for us last time
check w/ tiny to McQ damage.
Can hit him hard.
heads to take hard hit.
he + cruz at each others throat all time
emotionally charged
Black.


STOCK CAR RACES
THOMASVILLE SPEEDWAY
THOMAS

GARRETT TAYLOR Digital

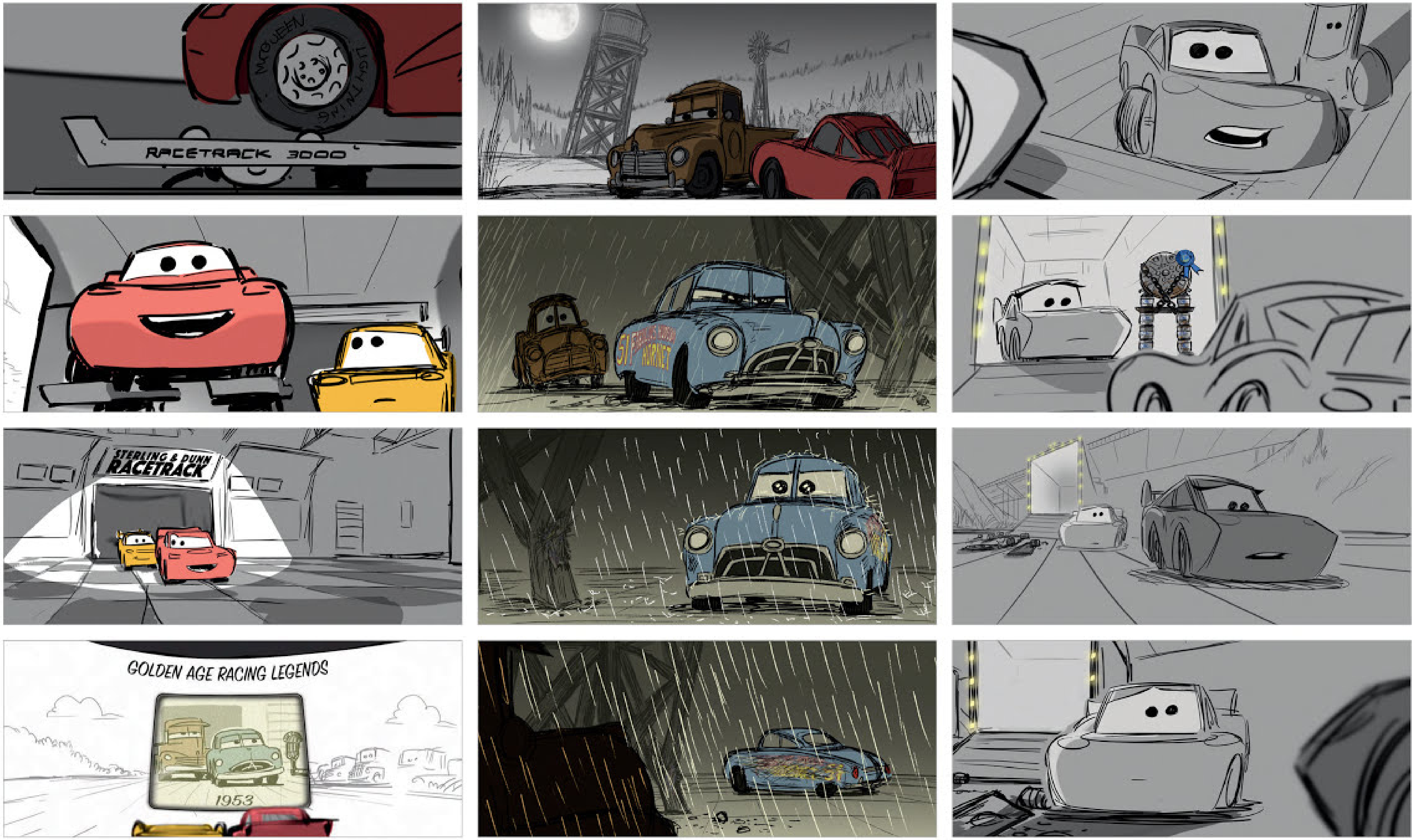
BULOUS HUDSON
HORNET
51
3

THE ART OF

Disney · PIXAR Cars 3

FOREWORD BY **JOHN LASSETER** • PREFACE BY **BRIAN FEE** • INTRODUCTION BY **BILL CONE** AND **JAY SHUSTER**

CHRONICLE BOOKS
San Francisco



Materials and characters from the movie *Cars 3*. Copyright © 2017 by Disney Enterprises, Inc. and Pixar Animation Studios. All rights reserved. No part of this book may be reproduced in any form without written permission from the publisher.

Library of Congress Cataloging-in-Publication Data is available.

ISBN: 978-1-4521-5642-2 (hc)
ISBN: 978-1-4521-6248-5 (epub, mobi)

Designed by Jessi Rymill

Chronicle Books LLC
680 Second Street
San Francisco, California 94107
www.chroniclebooks.com

Logo design by Andy Dreyfus

Front cover: Bill Cone, Digital

Back cover: Noah Klocek, Digital

Copyrights page outtakes storyboards: Chris Roman, Tony Rosenast, Louise Smythe

Disney/Pixar elements © Disney/Pixar; rights in underlying vehicles are the property of the following third parties, as applicable: Bentley is a trademark of Bentley Motors Limited, BMW, MINI and Cooper are trademarks of BMW AG; AMC, El Camino, Gremlin, Hudson, Hudson Hornet, Nash Ambassador, Pacer, Plymouth Superbird and Willys are trademarks of FCA US LLC.; Dodge®, Jeep® and the Jeep® grille design are registered trademarks of FCA US LLC; Darrell Waltrip marks used by permission of Darrell Waltrip Motor Sports; FIAT is a trademark of FCA Group Marketing S.p.A.; Fairlane, Ford Coupe, Mercury, Model T, and Mustang are trademarks of Ford Motor Company; Cadillac Coupe DeVille, Chevrolet, Chevrolet Impala, Corvette and Monte Carlo are trademarks of General Motors; Range Rover and Land Rover are trademarks of Land Rover; Mack is a trademark of Mack Trucks, Inc.; PETERBILT and PACCAR trademarks licensed by PACCAR Inc, Bellevue, Washington, U.S.A.; Petty marks used by permission of Petty Marketing LLC; Carrera and Porsche are trademarks of Porsche; Sarge's rank insignia design used with the approval of the U.S. Army; Volkswagen trademarks, design patents and copyrights are used with the approval of the owner Volkswagen AG; Background inspired by the Cadillac Ranch by Ant Farm (Lord, Michels and Marquez) © 1974.

CONTENTS

FOREWORD 7
JOHN LASSETER

PREFACE 9
BRIAN FEE

INTRODUCTION 11
BILL CONE & JAY SHUSTER

ACT ONE 23

ACT TWO 73

ACT THREE 139

OUTTAKES 162

ACKNOWLEDGMENTS 167

Medicated
Rust-eze
Bumper Ointment
Rear End Formula
95
McQueen
DINOCO
LIGHTYEAR

Layout by **JAN PFENNINGER,**
Animation by **MICHAEL STOCKER,**
Matte Paint by **PAUL TOPOLOS AND MATTHEW WEBB**

FOREWORD

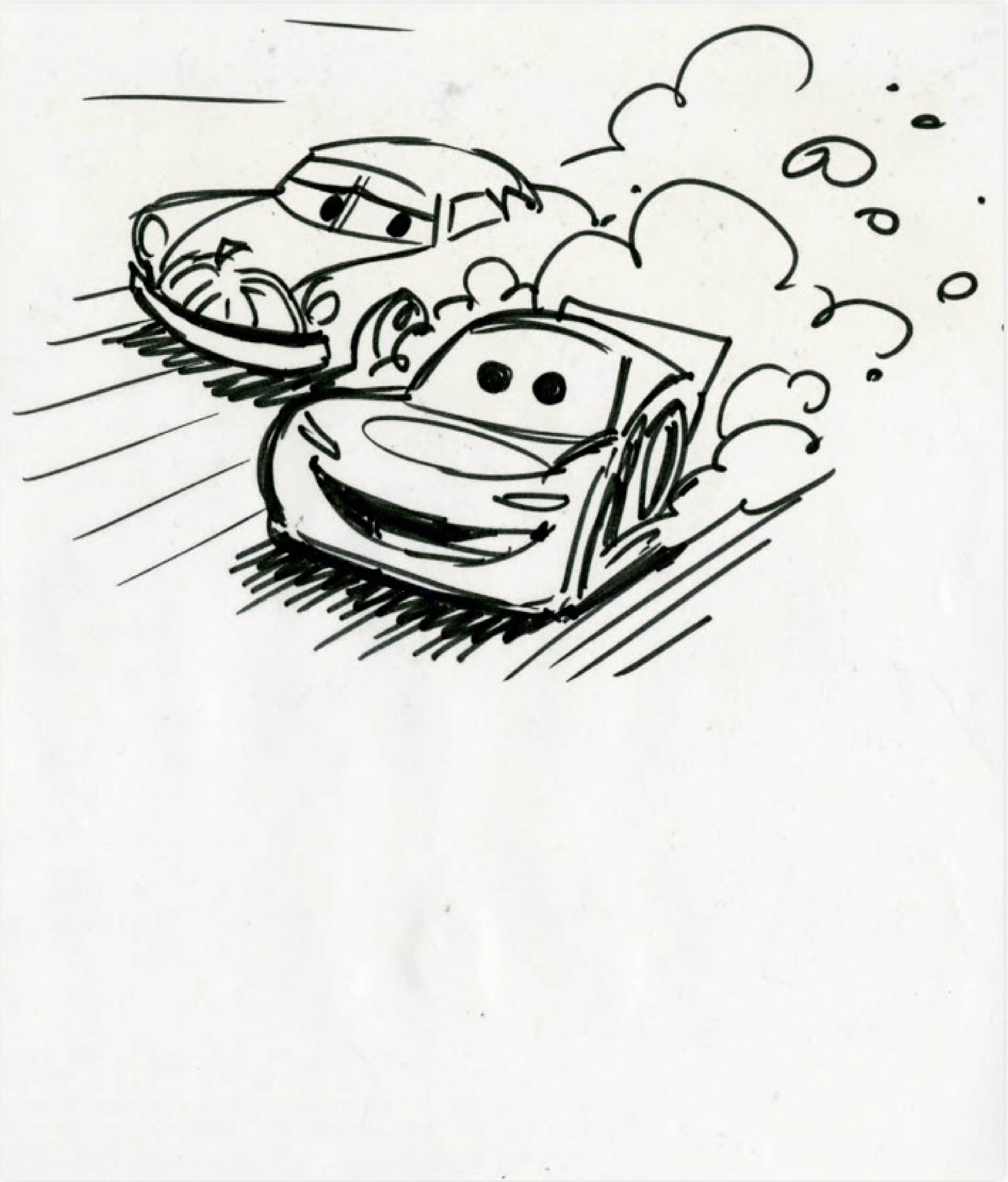
JOHN LASSETER

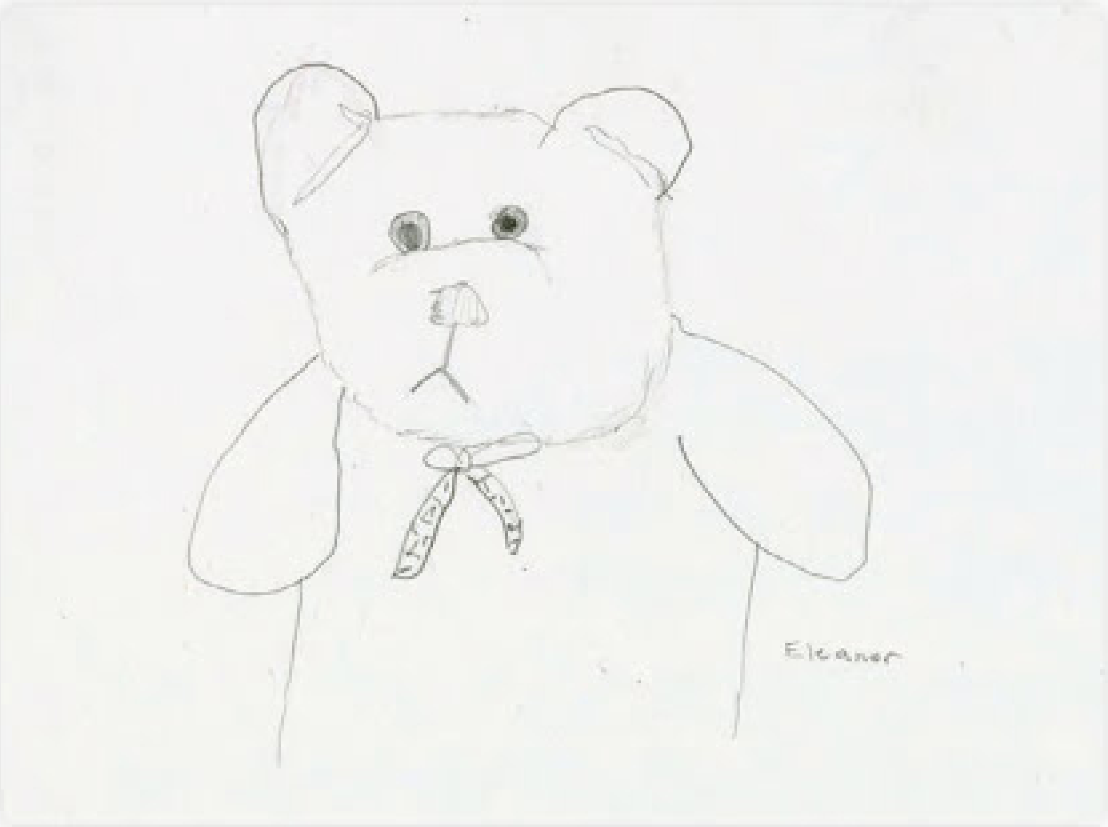
Making an animated film takes at least four to five years—sometimes longer—so at Pixar we never make a movie unless we've come up with a really great idea, one we're excited to work on every day for all those years.

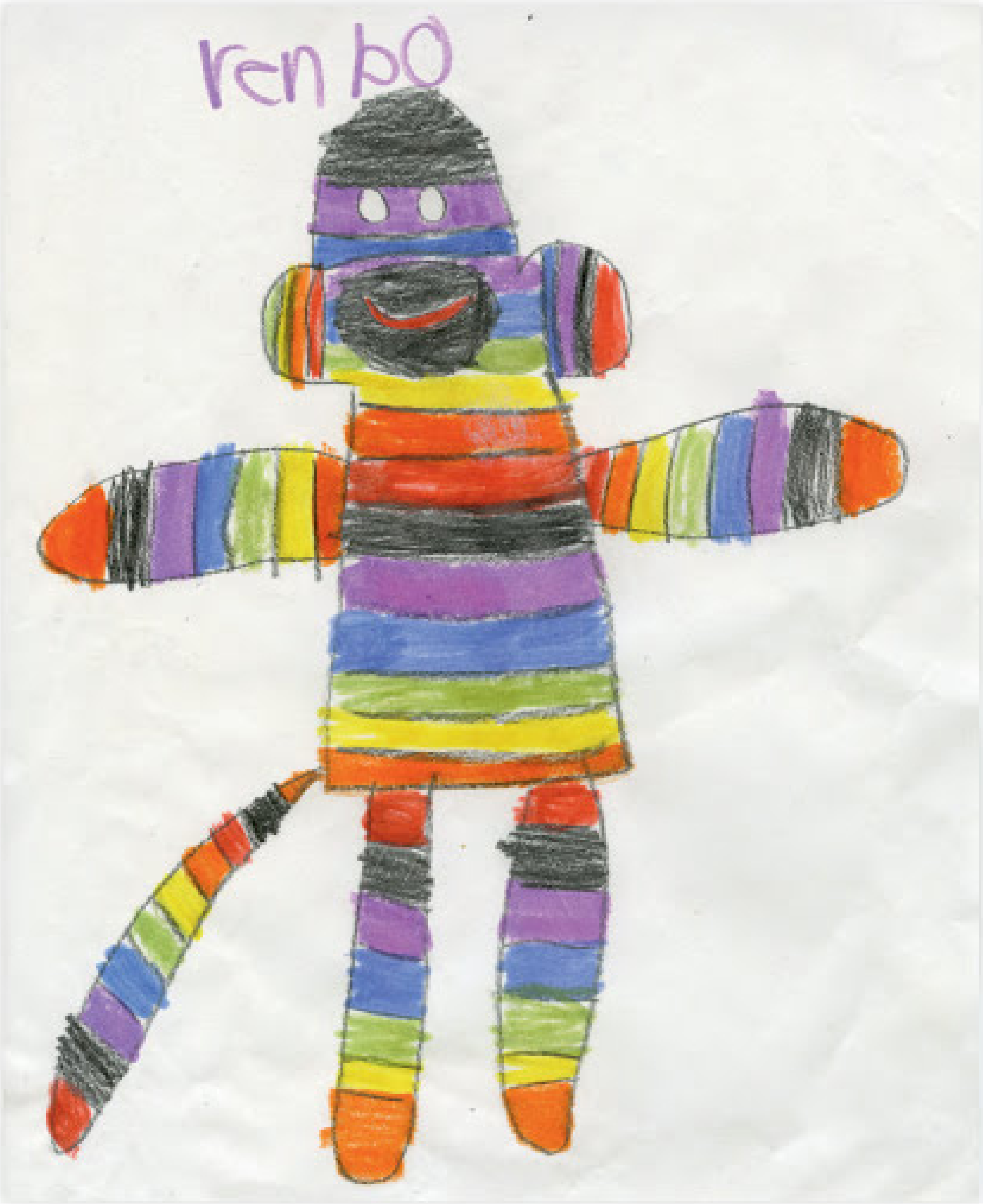
We've always loved the characters and world of *Cars*. The world of living cars is so rich with ideas and so fun to explore that once you immerse yourself in it, there's always a part of you that keeps seeing the regular world from that perspective. And when we thought about all the changes that have taken place in racing since the first movie came out, over a decade ago, we couldn't help but wonder how Lightning McQueen would be affected by them. What happens when a racer like McQueen goes from being a hotshot rookie to becoming a veteran of the sport? How would he handle the change that takes place when a new generation of young racers comes onto the scene?

More than either of the films that came before it, *Cars 3* is about racing—about the arc of the sport and the arc of a racer's career. Brian Fee, the director of *Cars 3*, worked with me on both the first *Cars* and *Cars 2*. He has a great sense of story and character, and a deep understanding of the *Cars* world that made him the perfect person to direct this film. He and his fantastic team have made an exciting, funny, and soulful movie about Lightning McQueen's emotional journey, his history, and his future in racing.

As someone who loves both doing research on a subject to see where things have been, and looking to the horizon to see where things are going, I love that the movie's story stretches from the gritty pioneers of the sport in Thomasville to the next-gen racers and the spectacular modern race track in Florida. Watching the film's amazing artists handle both ends of the spectrum, and everything in between, with such authenticity and skill was a truly special experience.







(clockwise from left) **BRIAN FEE, ELEANOR FEE, LUCIA FEE**

PREFACE

BRIAN FEE

My earliest childhood memories revolve around drawing. From copying the characters during Saturday morning cartoons, to reenacting (on paper) the scenes from the latest Sci Fi films, drawing and painting have always been a huge part of my life. After I entered the professional world, I thought I'd find the time to keep my love of art going, but the older I got, the busier life became and the time for my personal art started to slip away.

A few years ago I noticed my young daughters beginning to look at pictures the way I had when I was their age, wondering, how were these made? So one Saturday I set up one of their dolls as a still life and did a little painting demonstration. Doing my best to keep it interesting and appropriate for their short attention spans, I walked through sketching the doll's basic shapes, observing different colors in light and shadow, mixing colors…but before long, they became bored and ran off to play. For a moment I considered packing it in, but I thought that would send the wrong message, so I stuck it out for a few more hours. In the end though, I felt defeated. My children didn't care. I'd spent the afternoon painting a portrait of a doll, for nothing. If only I could go back in time, and use those precious hours working on any one of the many art projects I no longer had time for.

About a week later, I came across a drawing my older daughter had left in her room. I pulled it out to get a better look and will never forget what I saw. She had set up a still life of one of her stuffed animals and had carefully drawn its portrait. As small as it may seem, discovering that drawing is a moment I'll remember for the rest of my life. Not only had she been paying attention that afternoon, she had even been inspired to take the time and sit down and have an experience of her own. Seeing that was more rewarding, more special for me than painting a hundred projects for myself.

That moment was my touchstone while making *Cars 3*. I'd gone into that painting lesson thinking I was going to help my daughters learn something, but instead, I was the one that had the life-changing lesson. I got to experience first hand that the mentor gains just as much, if not more than the mentee.

During the production of *Cars 3,* I was the one learning from the creative and talented crew. Everyday was like taking a master class and it's been the biggest privilege of my career. I am excited and honored to share in these pages a sampling of the many thousands of beautiful drawings and paintings created for the film. I hope they will inspire future generations of filmmakers to come.

POOL ROOM
4 DAYS TILL CHASE ELLIOTT
RACE XFINITY AT ATLANTA
FLEXSEAL
01
Ranger
Cutlass
415
BSFee
DIXIE
SPEEDWAY
Racing
NIGHT 8PM
TURN HERE!
FABULOUS HUDSON HORNET
6
who needs 8
HUDSON
DAYTONA
INTERNATIONAL SPEEDWAY
ENTRY
#DAYTONA500
DAYTONA 500
Chevron

BILL CONE AND JAY SHUSTER Research photos

INTRODUCTION

BILL CONE & **JAY SHUSTER**, PRODUCTION DESIGNERS

When approaching a sequel from a design perspective there is a variety of issues and questions one needs to address. First, what is the nature of the world that has already been established, and furthermore, can it evolve and expand (both for the designer and the audience) in a meaningful and entertaining way? In addition, where is the story taking us this time? What journey, both physical and metaphorical, must be researched and pondered in order to build a world that satisfies and enhances the narrative?

These were the sort of thoughts that occupied me in 2012, when I was asked to co-design *Cars 3* with Jay Shuster. As veterans of the franchise, we knew where we had already been, and were curious what opportunities to push the envelope this film would offer. In the early stages we explored the potential of SoCal culture, incorporating car-sized skateboard parks, automotive high-fashion expressed through wrap jobs, cosmetic body work, custom wheels and tires, and the appearance of "celebrity cars" at swank parties in the Hollywood Hills. This world was contrasted with the stark minimalism of a dry lakebed in the desert where cars raced for the sheer joy of speed.

Over time, the story's focus shifted from one of identity theft, mingled with a budding mentorship story, into a more specific tale about an aging, mid-career athlete (Lightning McQueen) struggling to make a comeback from a crash after suffering through a series of losses to a younger generation of racers. The mentorship theme also came into focus as a key element, aligning McQueen's path with that of Doc Hudson's in the first film.

The location shifted to the Southeastern United States, with more than a nod toward the origins of NASCAR in the rural South, where the best drivers and mechanics at the dawn of stock car racing were gainfully employed

in the transportation of moonshine. In February of 2015, a group of us made a trip to Florida to watch the Daytona 500, which opens the racing season. The day following the race, Jay and I flew to Atlanta, rented a white Camaro, and set off on a three-day journey that took us through the mountains of North Georgia to Asheville, North Carolina, then east to Charlotte, where we visited several racing facilities, including a state of the art wind tunnel. Along the way, while stopping to eat and take pictures, we met and spoke with a variety of folks whose humor and character helped us get a sense of how people are at home in that part of the world.

Prior to the trip, I'd made extensive use of Google Earth, dropping down onto country roads all over Georgia, examining terrain and architecture, even planning some of our routes to visit specific spots I'd located. It turned out that most of the Google Earth Street View places I looked at were shot in the summer and fall! North Georgia in February is a rather different world, with dense bare trees lining the roads and hills, and even though the elevations are not very high, snow covered much of the ridge lines, and icicles lined the steep, rocky gaps of the mountains we passed through. The moody winter landscape we unexpectedly encountered offered an effective visual foundation for our main character, pondering his future viability. It also opened the door for reimagining Radiator Springs in a season other than perennial summer, with snow dusting the rim of the valley, and cloud shadows passing over. Letting go of preconceptions about place, and listening to what nature is offering up were just some of the lessons learned, and opportunities taken, in the course of designing for this film.

—**BILL CONE,** Production Designer

Planned obsolescence. I grew up hearing these words frequently. Uttered by folks irate because their car was falling apart—the phrase was a catchall to express and shake a fist at the mythic (or is it?) conspiracy manufacturers employed to sell a new model annually. Centric to the story of *Cars 3* is a theme of *unplanned* obsolescence. That is to say McQueen didn't see it coming—until the day a sleek new breed of Piston Cup racer arrived at the track and ate McQueen's lunch.

Think back 10 years to McQueen's rookie season: He was the vehicle of change. His custom paint and curvaceous aerodynamics shown brightly against a backdrop of beleaguered and outdated angular racers. Before the flag even dropped McQueen knew he was the one to beat. Swagger begot swagger. Winning begot winning. No one stopped him—until Radiator Springs stopped him in his tracks.

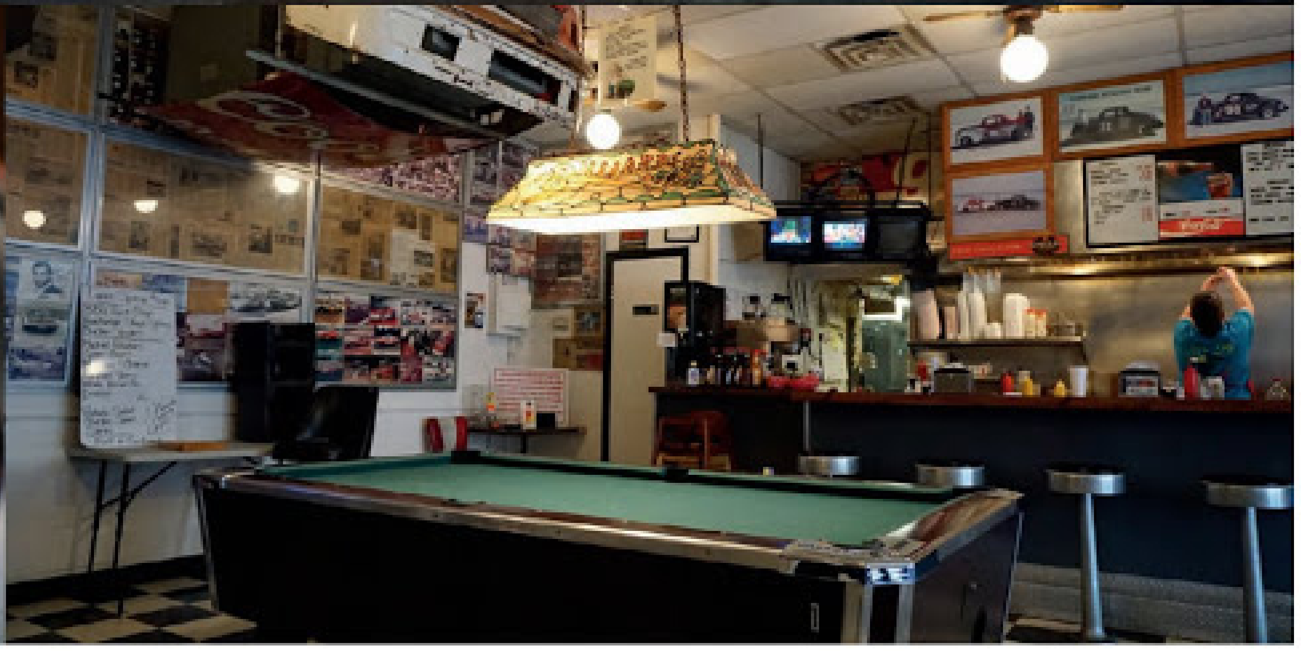
Flash forward 10 years and seven Piston Cup Championships later, gratified with good friends and his ego at rest—he now faces the same threat of extinction his aging competition once did. Despite his drive and focus on that checkered flag, McQueen cannot deny the effects of time and wear on his underpinnings. And then came the next season of rookie talent bringing with them new and improved ways to deliver power to the track. The frictionless and lightweight components run by these upstarts shave milliseconds off the lap time. And that's only below the body shell—imagine if Piston Cup were to approve the next generation of body styles for the 2017 season. Enter the menacing low and stealthy lines of a racer named Jackson Storm.

We start every design you see on the screen with a deep dive and thorough research pass on every character in the script. Half the fun of creating these characters is taking parts of different cars we love and combining them into a single, cohesive character. Storm was no exception: We spent years refining his character and form. He was born in the story room with an ego and mile-high rear spoiler to match. He was immediately crossing the line of logic for anyone familiar, in the least, with American stock car racing. Of course racing in our car's world, from the get go, has been untethered by the rules and regulations of real-world racing. We raced a 1970 Plymouth Superbird against McQueen against a current Formula One racer and Le Mans LMP car. The rules are wide-open in our animated world, though I still wanted to give Storm a soul rooted in an alternate stock car universe. In doing so it was impossible to ignore the influence of hyper-sports car designs prevalent the world over. Storm's design had to be a hybrid of pushed and refined forms unlike any we've seen compete in a Piston Cup race before. Most importantly, Storm had to be a living, breathing contradiction to everything McQueen is.

BILL CONE AND JAY SHUSTER Research photos

TATE
GAINESVILLE
DAHLONEGA

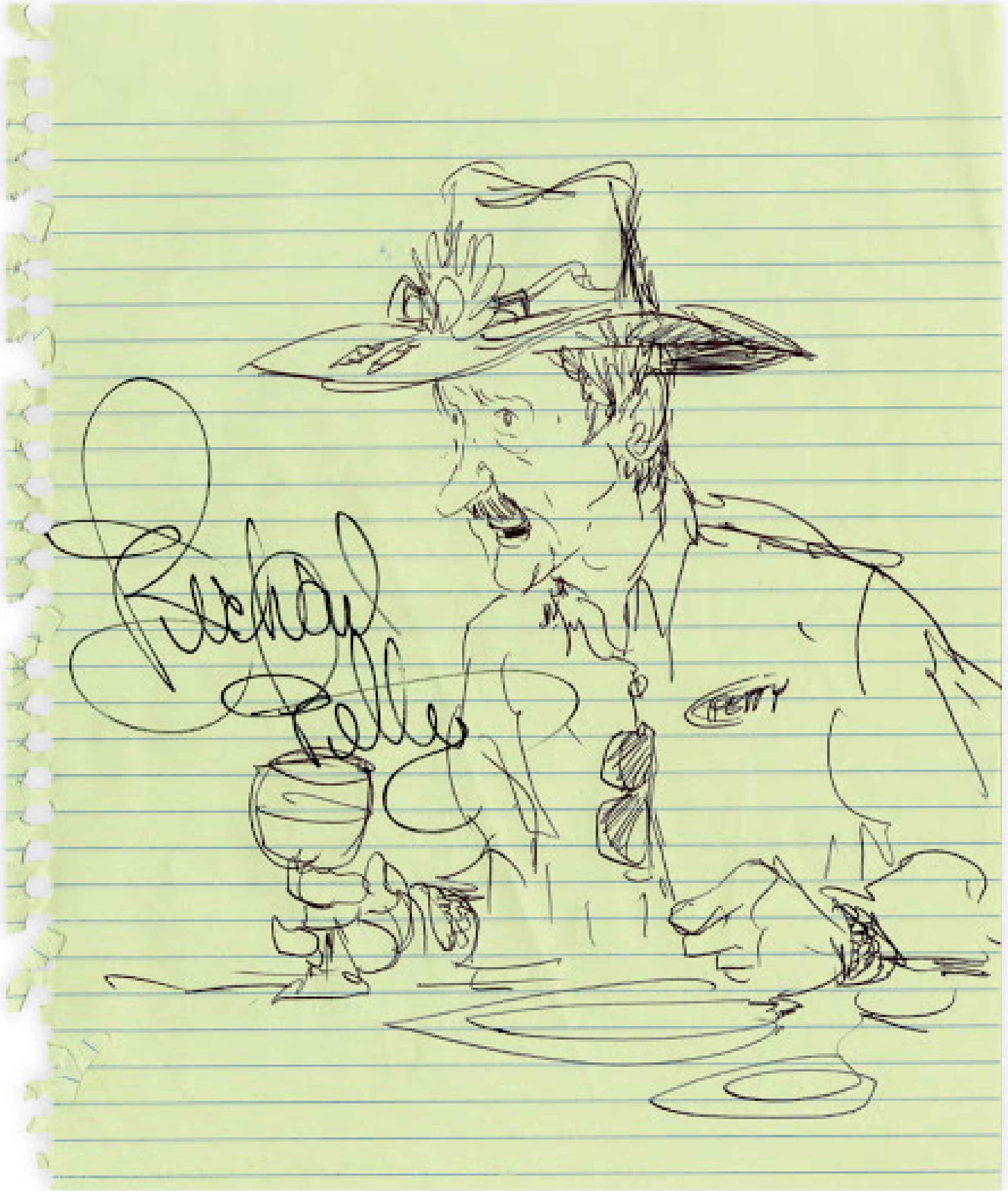
Gober SOSEBE



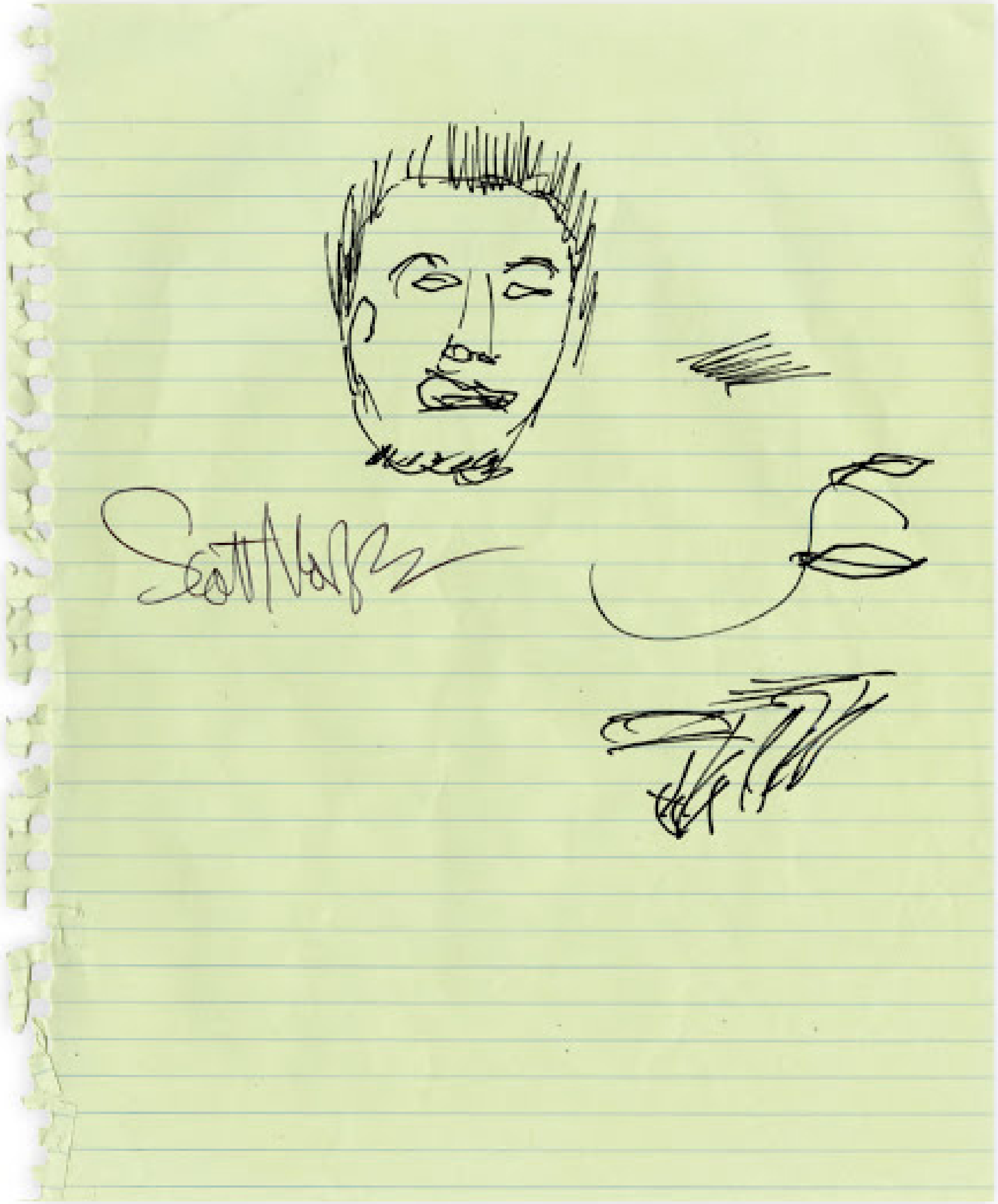
As part of our research, we pick the brains of the professionals to make sure we're on the right track. Kicking off our research into all things NASCAR, a group of us flew down to Daytona Beach for the 500. I had the opportunity to ask NASCAR legend, Ray Evernham, about his ideas about the future look and build of NASCAR racers. I pulled out a few Next-Gen racer sketches seeking even a hint of approval from this veteran crew chief and all-around gearhead. This guy knows his race cars. He glanced through the sketches quickly, sighed, and said something to the effect of, "I'd race that if I could!" It was all the confirmation I needed!

Like the reliable family hauler you trust will get you across town every time, the movies we work on can experience surprises and breakdowns. But like my dad who's kept a variety of Chevrolet Corvairs running like new for decades, people persist when they have passion for their craft; their love for creating keeps the throttle down and the rubber on the road. It is with this same passion that we present the *Art of Cars 3*: Consider it an owner's manual for your newest joyride.

—**JAY SHUSTER**, Production Designer



SCOTT MORSE Pen

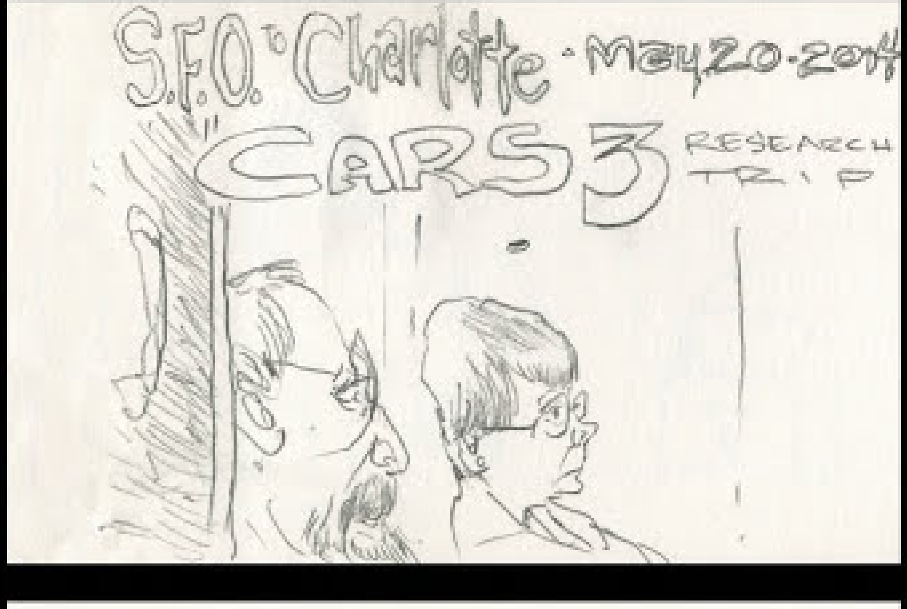


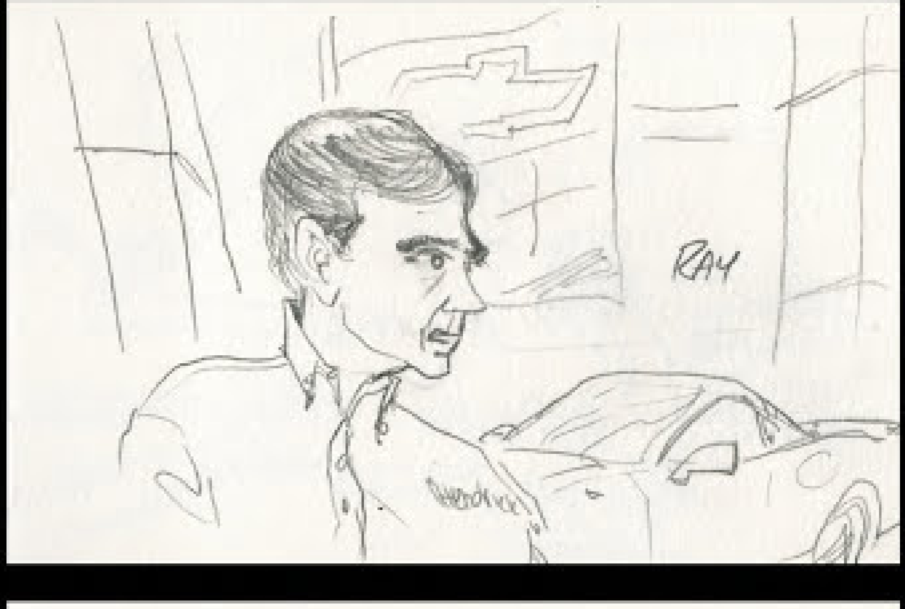
RICHARD PETTY Pen

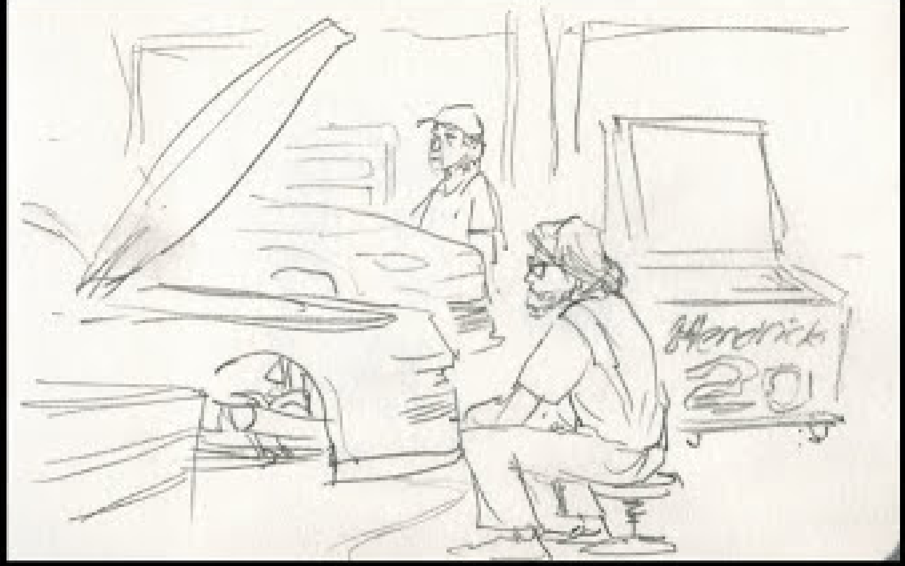
Building fictional stories always starts with observing the real world around you. Analyzing what makes something authentic helps breathe life into the characters you're crafting. We began to dig deep into the rich history and roots of the racing world on our research trip to North Carolina. My sketchbook came out any time we began to feel the wonder of a new setting or the emotion in a conversation. We had no way of being sure in the moment, but these were the seeds of our story.

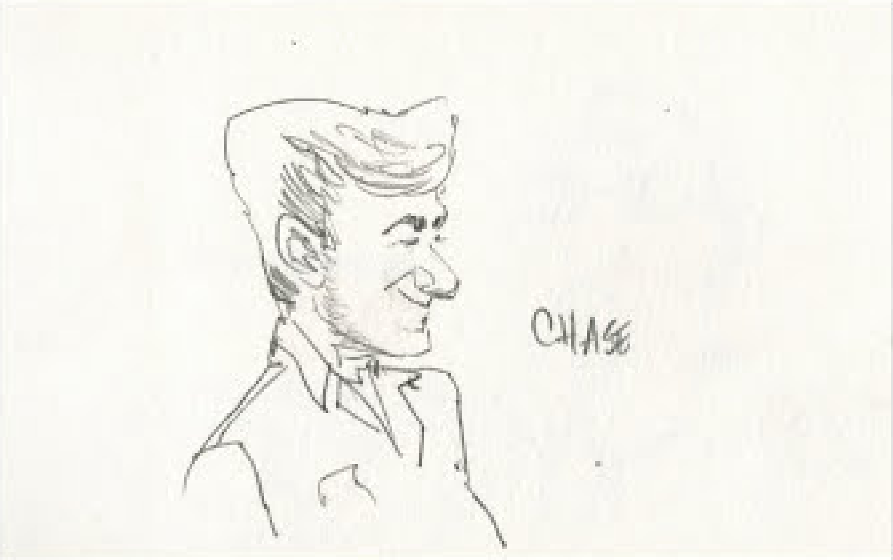
On our research trip to Charlotte, North Carolina, we were honored to have dinner with legendary racer champ Richard Petty. Things got interesting when he noticed I'd done a quick caricature of him: He quickly signed it, then proceeded to do a caricature of me!

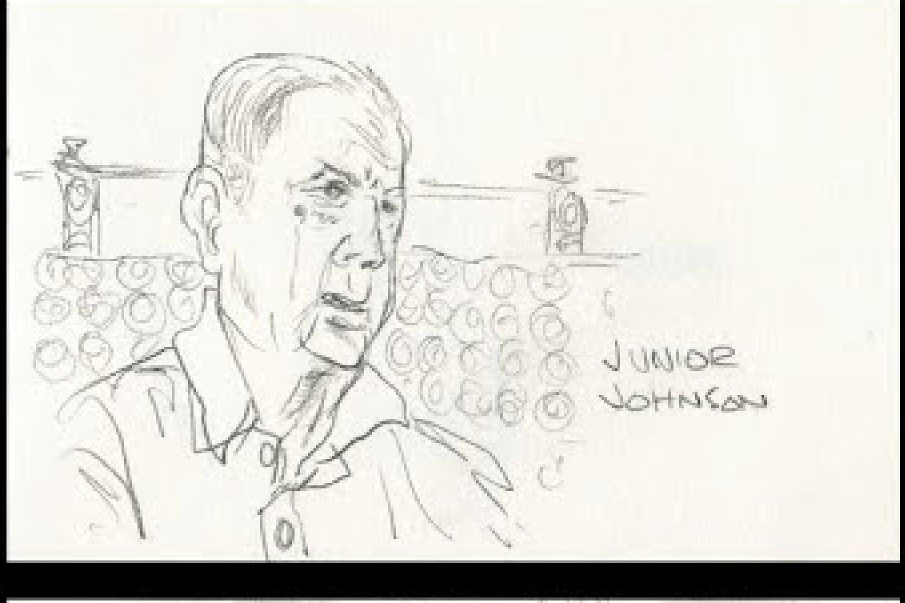
—**SCOTT MORSE**, Story Supervisor

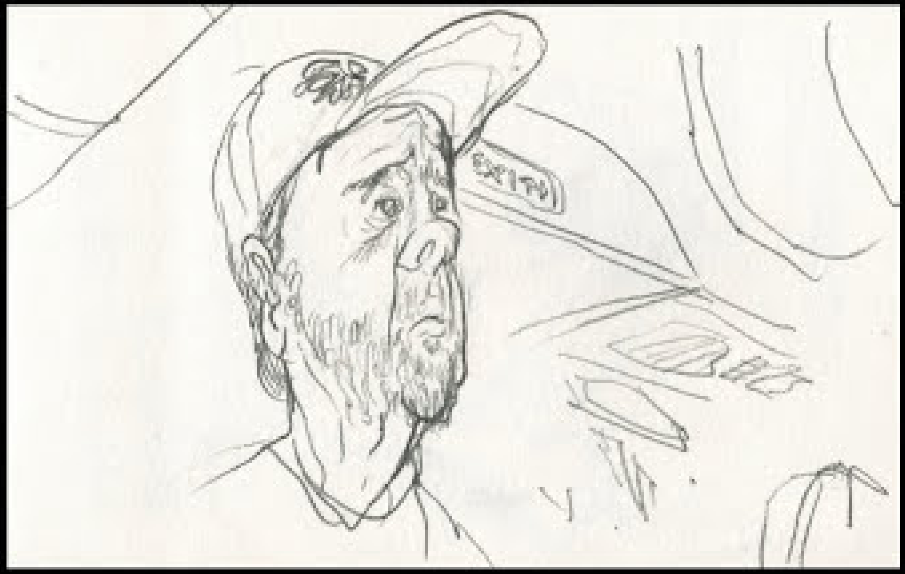

S.F.O. Charlotte · May 20 · 2014
CARS 3
RESEARCH TRIP

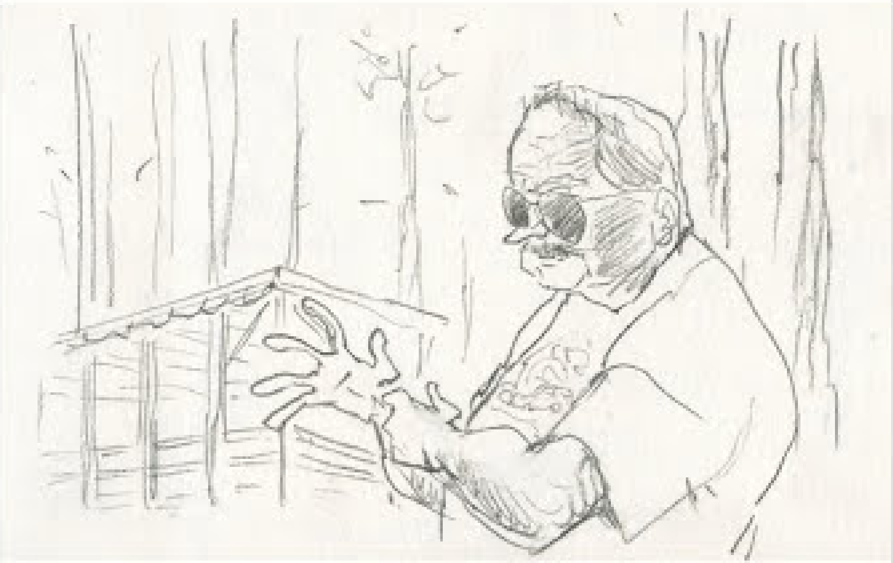

RAY
Hendrick

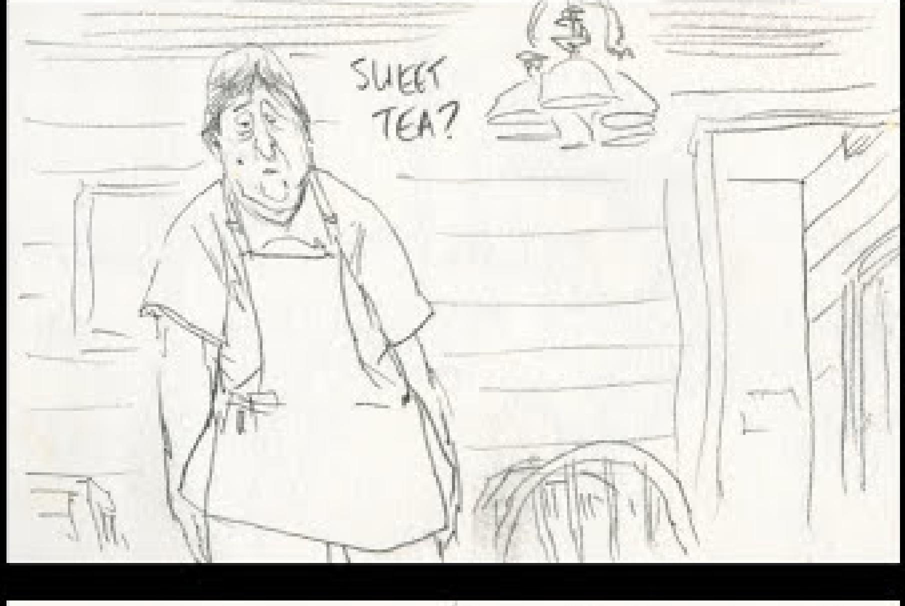

Hendrick
20

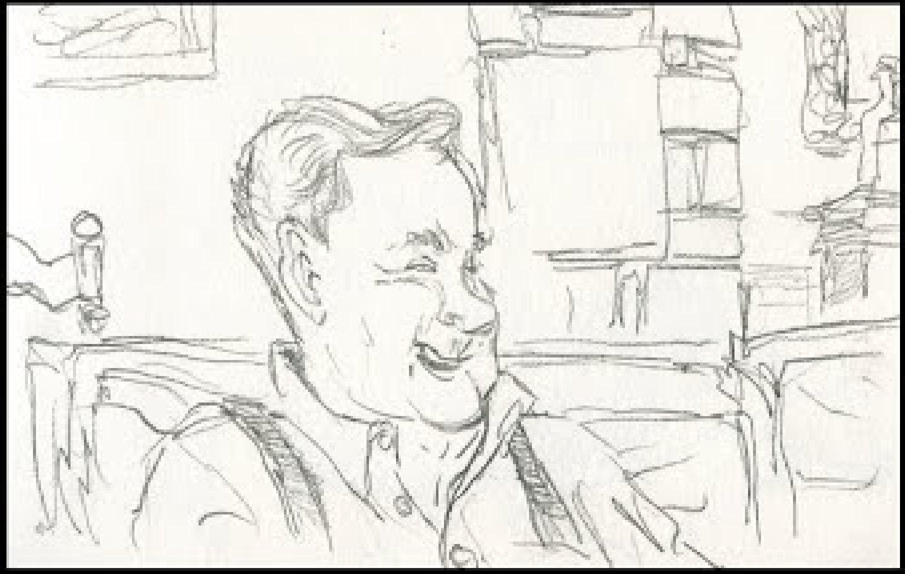

CHASE

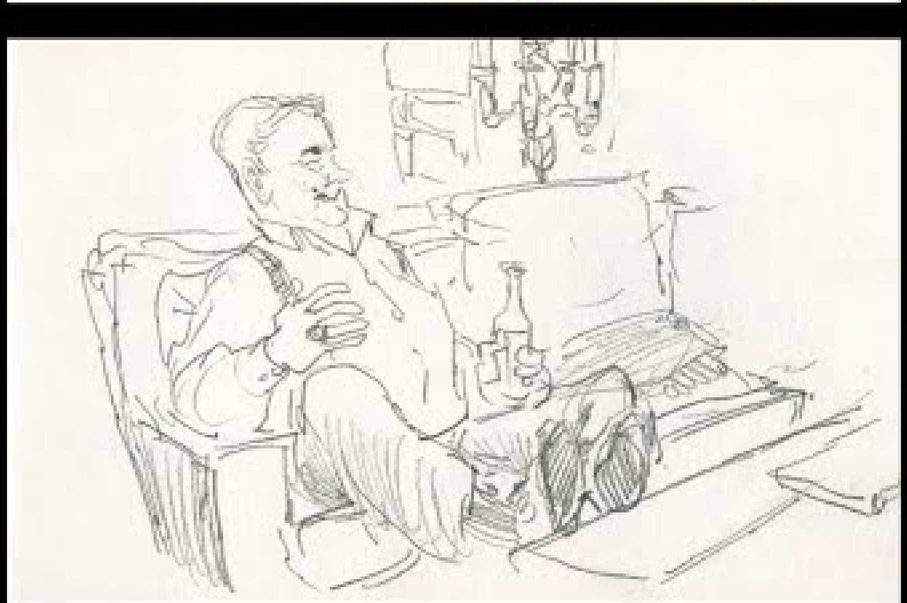

JUNIOR
JOHNSON

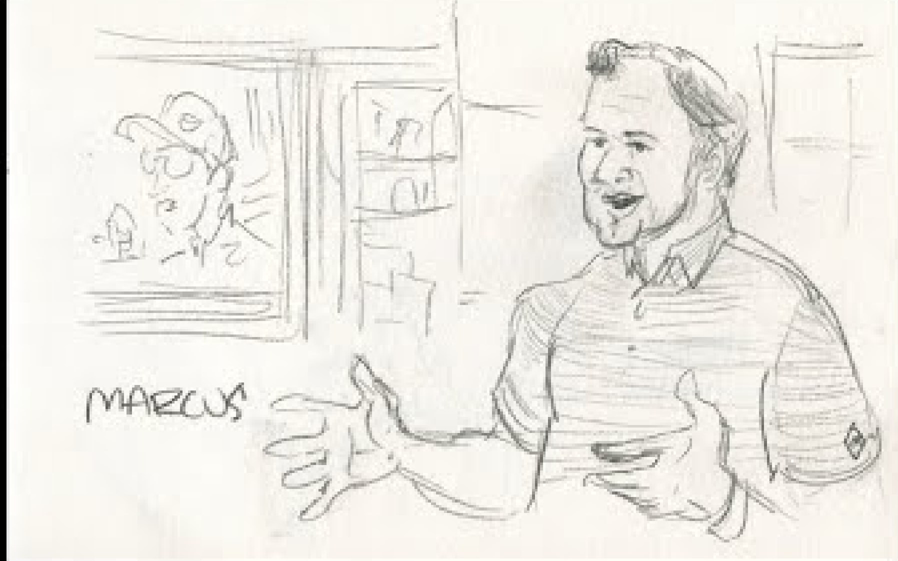


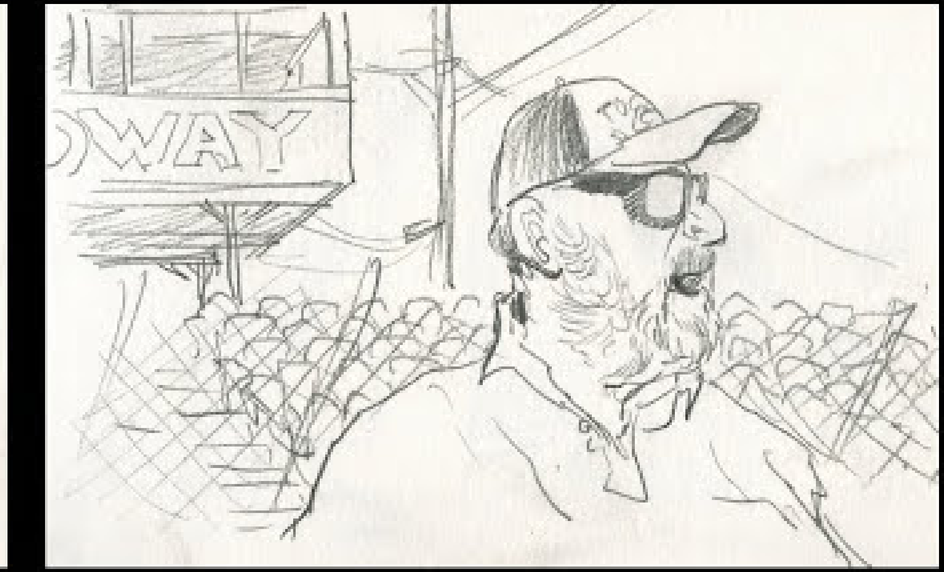


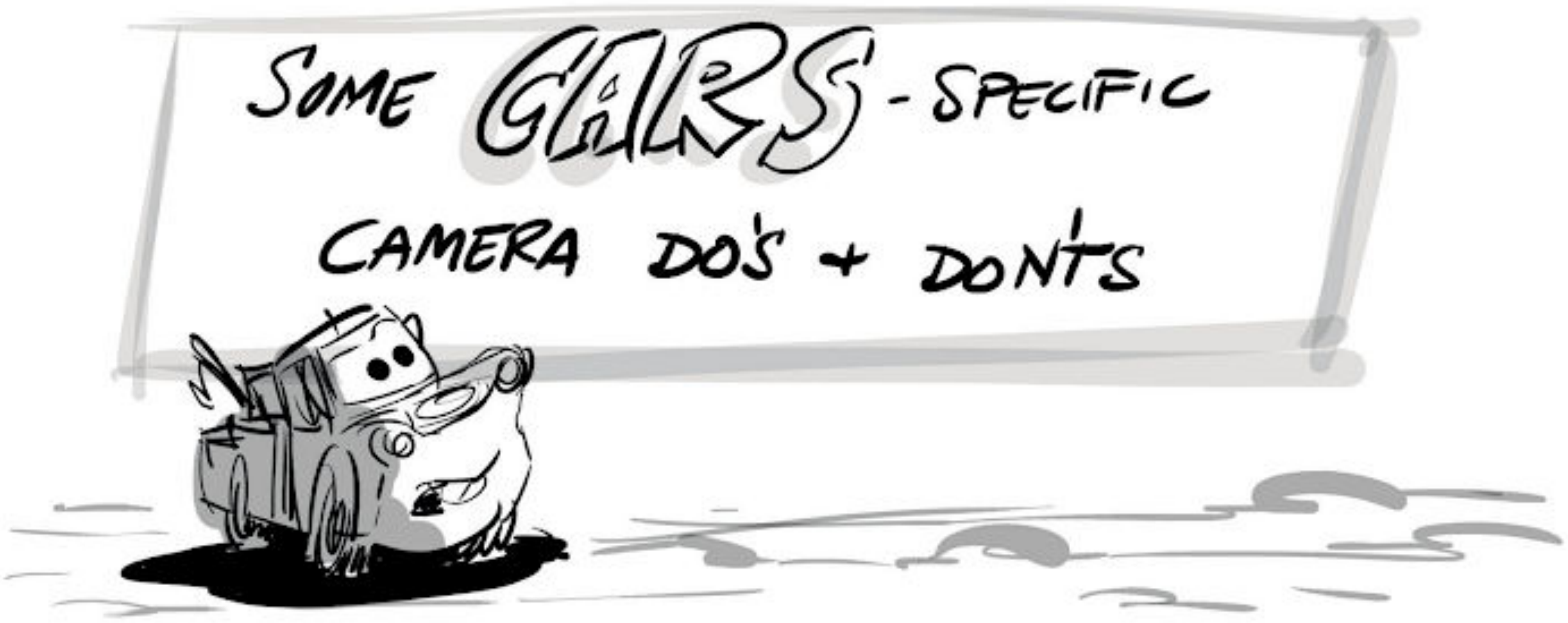

SWEET
TEA?






MARCUS


WAY



SOME CARS-SPECIFIC CAMERA DO'S + DON'TS

Our films hinge on the strength of our stories. The story team draws that strength from many directions as we craft plot points and dig deep for genuine, unique personal experiences to inject into our characters. The team takes all of these ingredients and brings them to life in sequential images. We strive for a coherence and economy in our story drawings that, when brought together, evoke emotional movie moments if we've done our job right. The trick is, we rarely get it right at the beginning of the process. Sequences are rewritten and redrawn in the story phase many times over the course of filmmaking. With each pass we task ourselves with "thinking twice and drawing once," and we try to remind ourselves how best to capture clarity and charm in our drawings. We fail constantly and remind ourselves to look at these traps we fall into as opportunities to learn and become better at what we do. In the end, the film is stronger because we challenge ourselves along the way.

—**SCOTT MORSE**, Story Supervisor

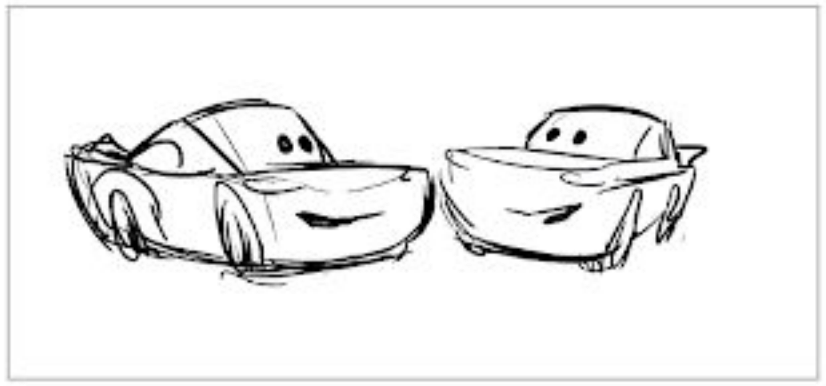
- CARS ARE PHYSICALLY BIG
  - NOT HUMAN PROPORTIONS FOR EMOTION
  - WEIGHT + BELIEVABILITY
- THINK "MOVIE THEATER" - NOT TV
  - CAN BE OVERPOWERING
  - ABSTRACT
- THINK IN CAMERA/LENSES
  - NOT ILLUSTRATION
- ECONOMY
  - JUST ENOUGH TO SELL THE MOMENT

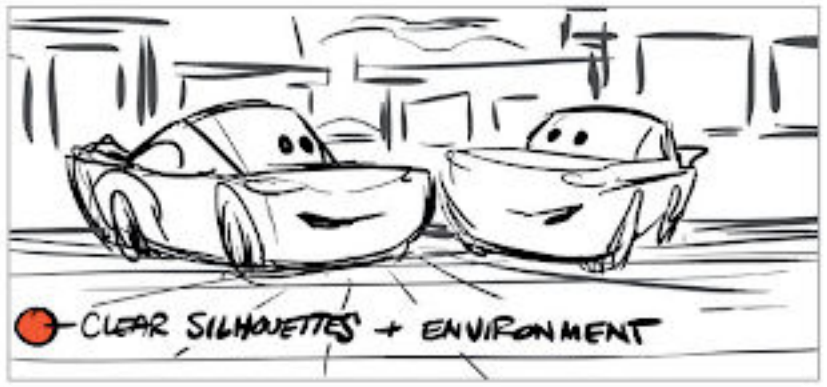
"LIVE IN" THE MATERIAL AND
MAKE SHOTS
IMMERSIVE.

* EMOTIONAL EXPERIENCE WILL WIN *

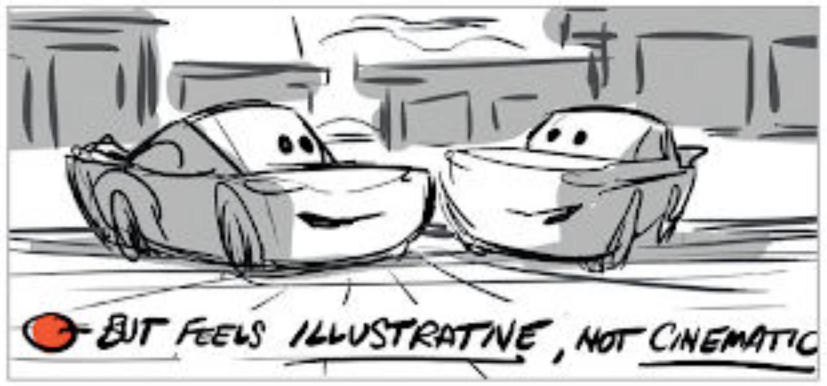
TRAP #1

PRESENTATIONAL STAGING

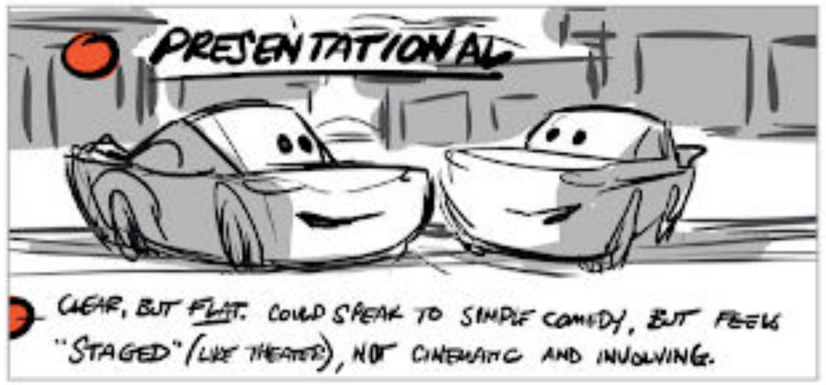




CLEAR SILHOUETTES + ENVIRONMENT



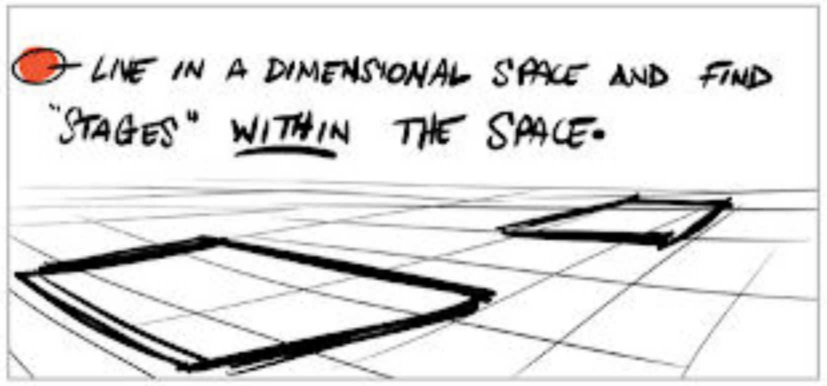
BUT FEELS ILLUSTRATIVE, NOT CINEMATIC



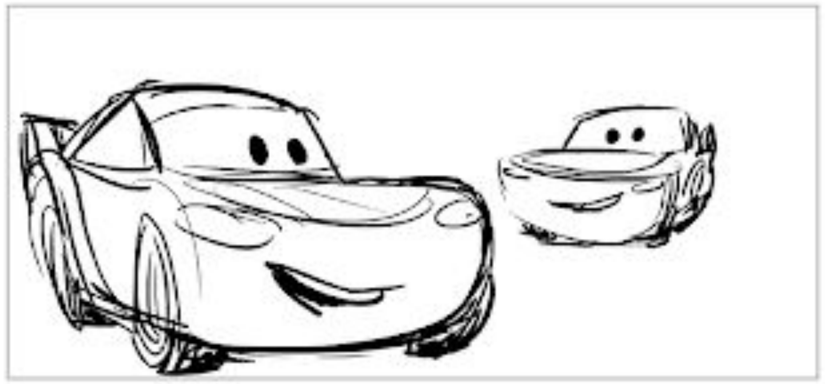
PRESENTATIONAL

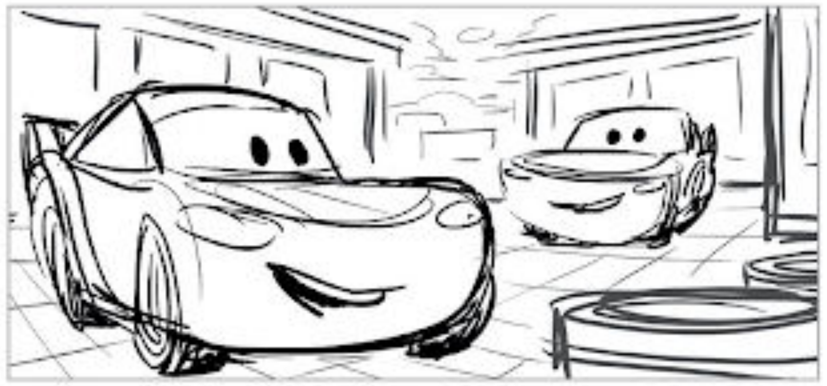
CLEAR, BUT FLAT. COULD SPEAK TO SIMPLE COMEDY, BUT FEELS "STAGED" (LIKE THEATER), NOT CINEMATIC AND INVOLVING.

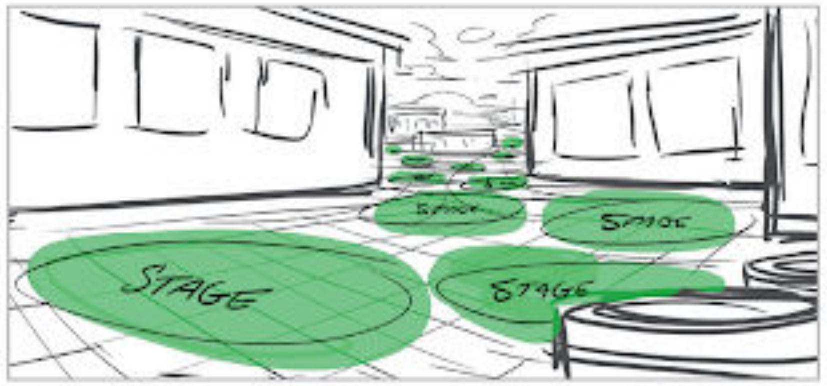
POTENTIAL ADJUSTMENT:

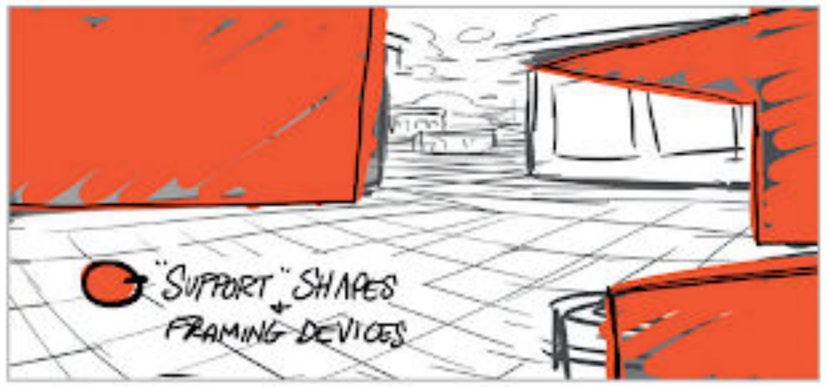


LIVE IN A DIMENSIONAL SPACE AND FIND "STAGES" WITHIN THE SPACE.

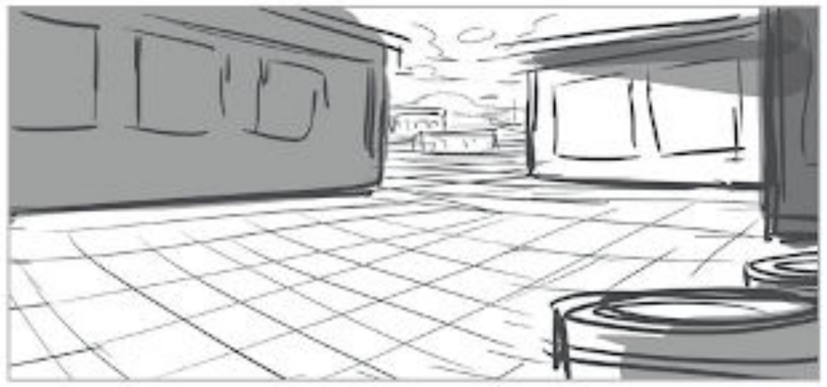


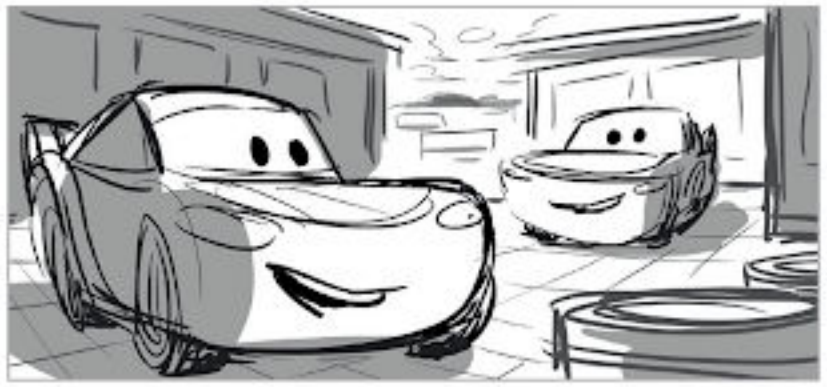






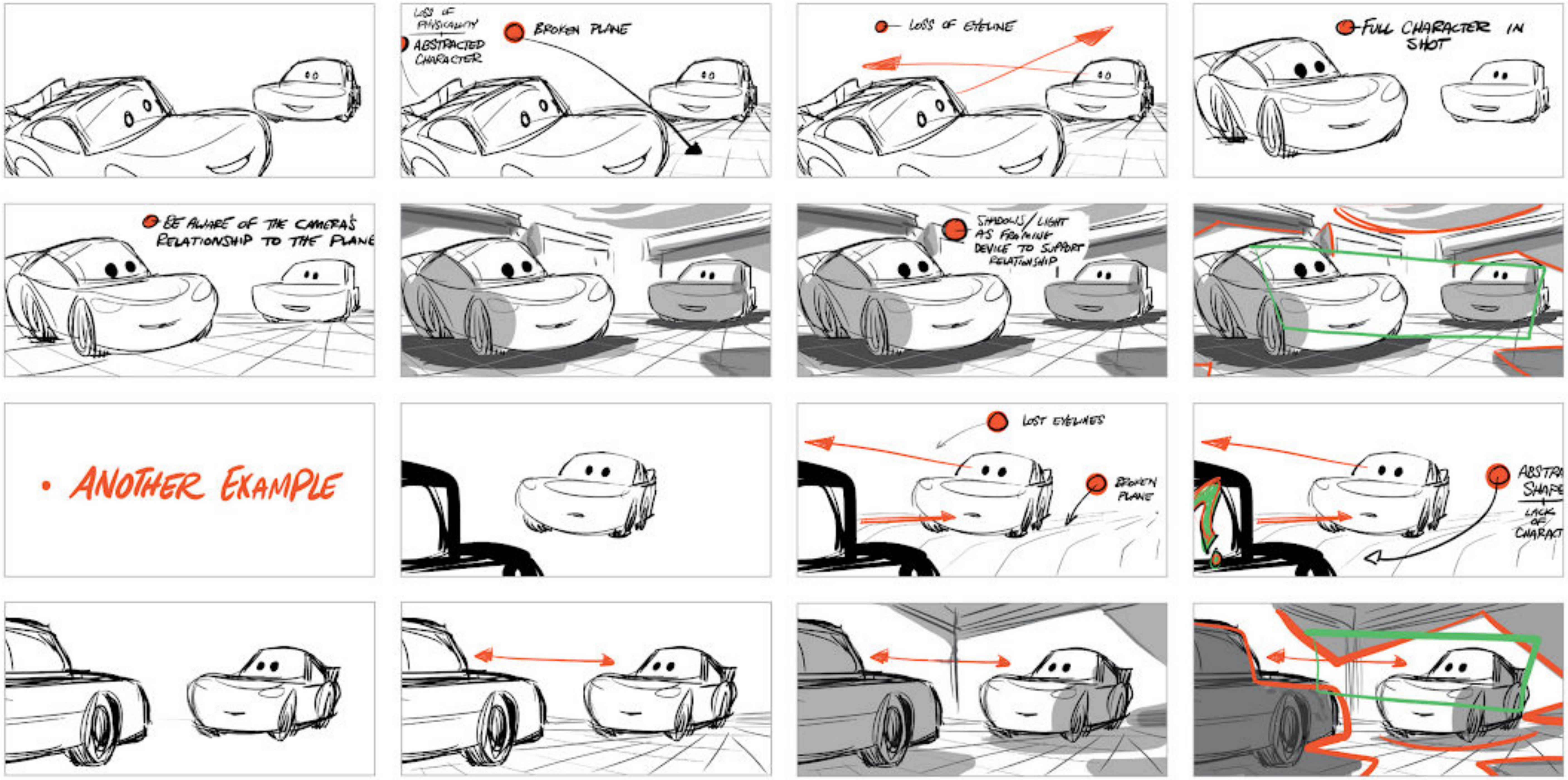
"SUPPORT" SHAPES + FRAMING DEVICES





TRAP #2

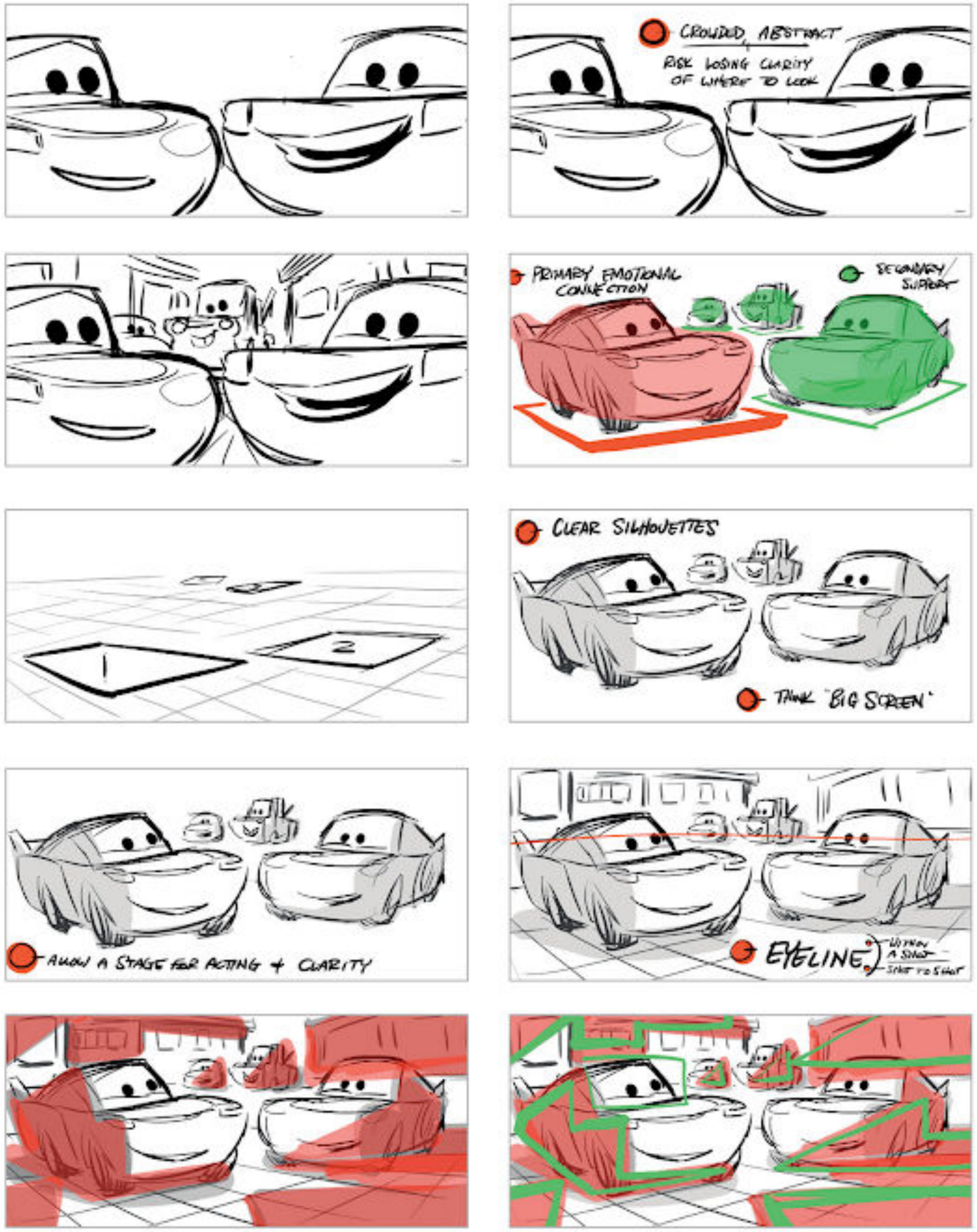
LOSS OF EYELINE THROUGH SPACIAL RELATIONS


LOSS OF PHYSICALITY + ABSTRACTED CHARACTER
BROKEN PLANE
LOSS OF EYELINE
FULL CHARACTER IN SHOT
BE AWARE OF THE CAMERA'S RELATIONSHIP TO THE PLANE
SHADOWS/LIGHT AS FRAMING DEVICE TO SUPPORT RELATIONSHIP
• ANOTHER EXAMPLE
LOST EYELINES
BROKEN PLANE
ABSTRA SHAPE + LACK OF CHARACT

SCOTT MORSE Storyboards

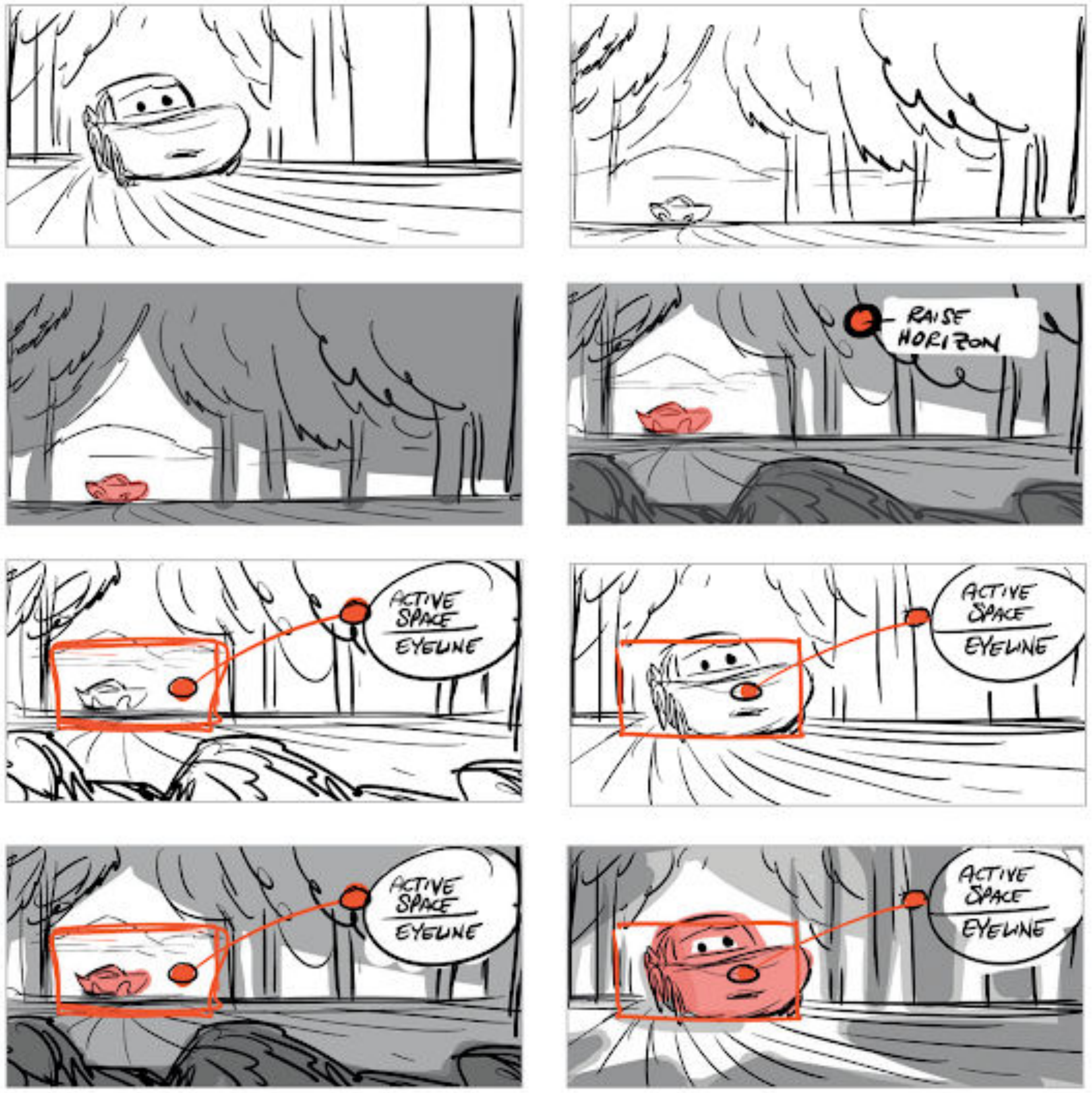
TRAP #3

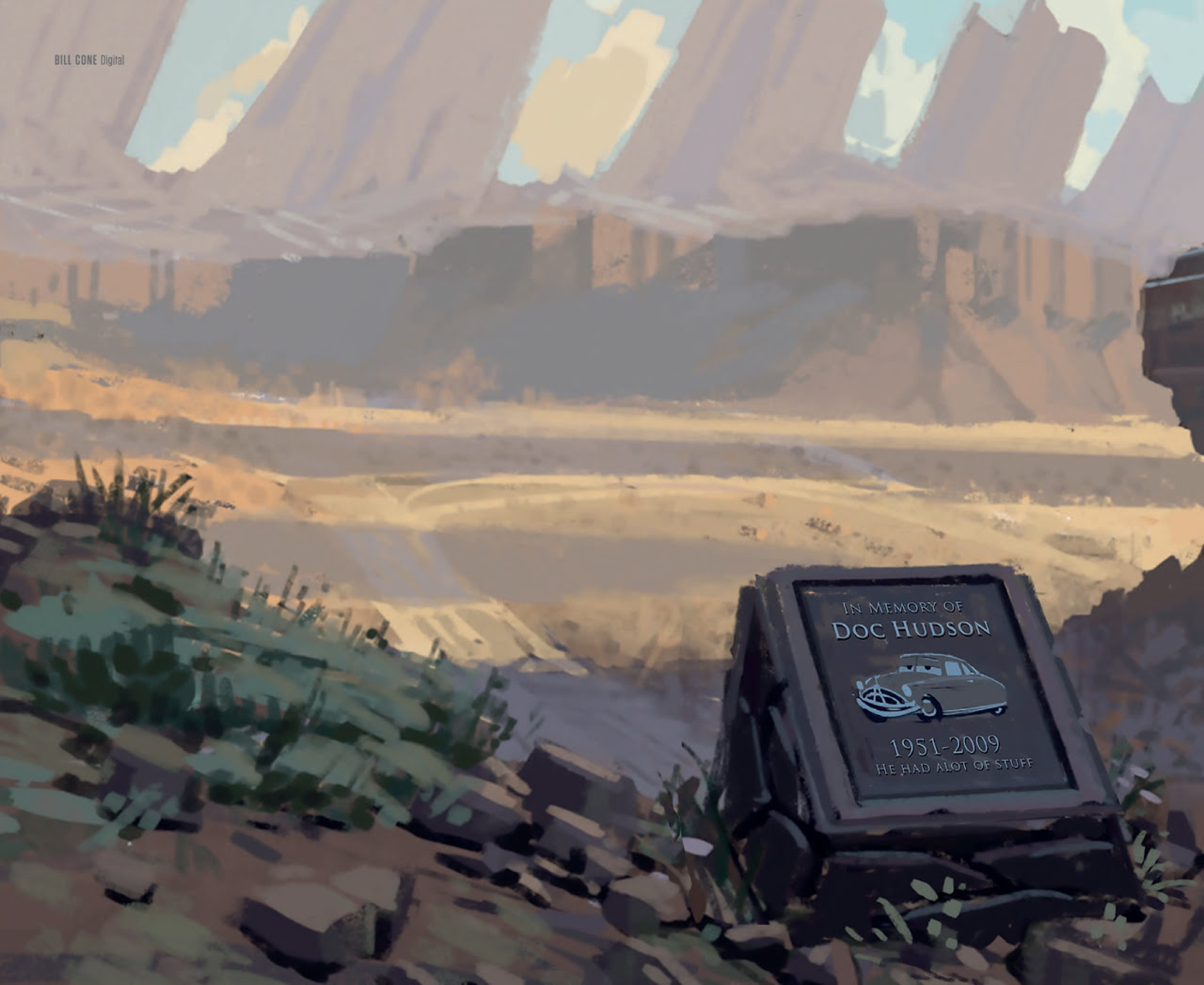
LOSS OF EMOTIONAL FOCUS


CROWDED, ABSTRACT
RISK LOSING CLARITY OF WHERE TO LOOK
PRIMARY EMOTIONAL CONNECTION
SECONDARY/ SUPPORT
1
2
CLEAR SILHOUETTES
THINK "BIG SCREEN"
ALLOW A STAGE FOR ACTING + CLARITY
EYELINE
WITHIN A SHOT
SHOT TO SHOT

TRAP #4

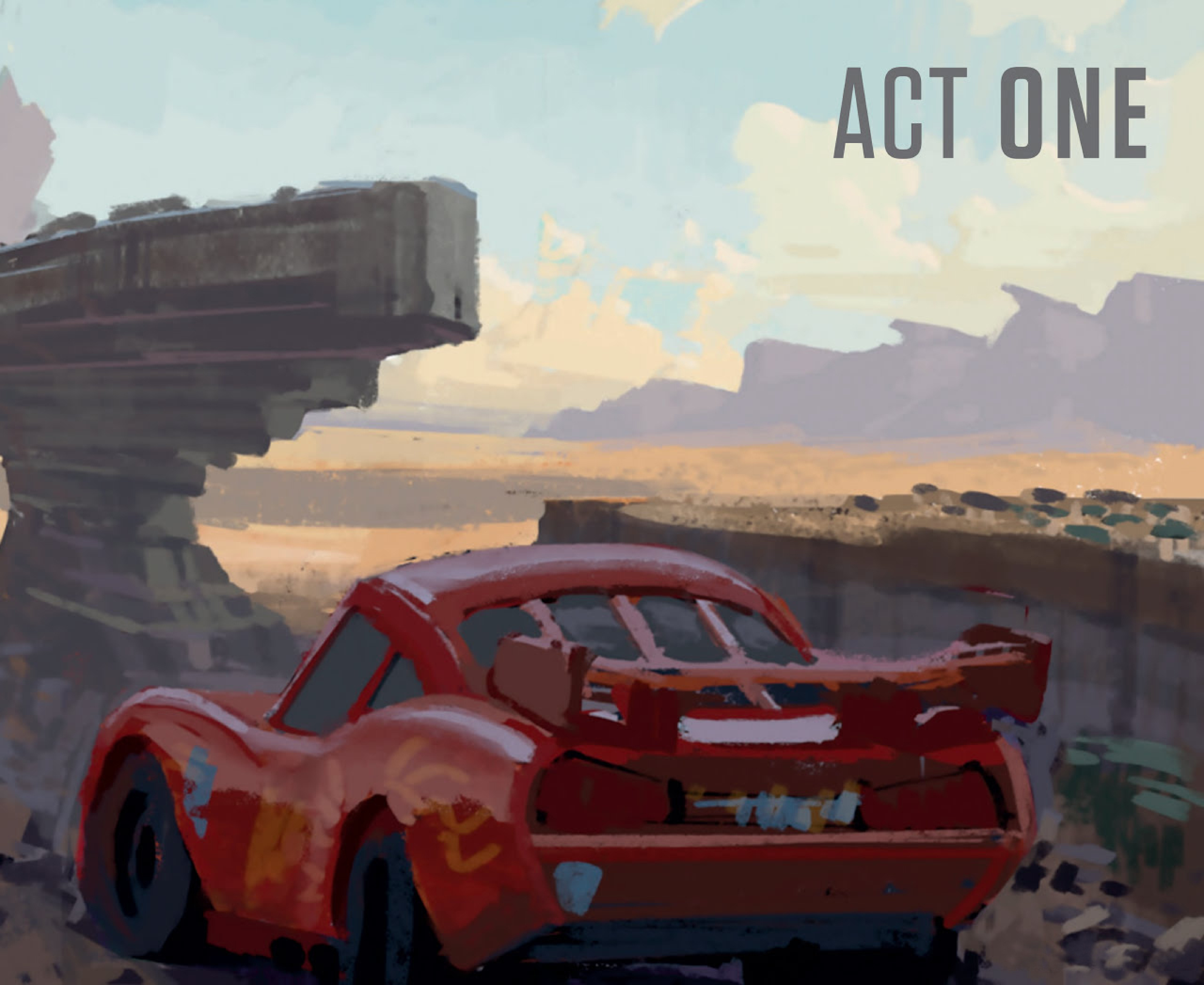
TRACKING CHARACTERS ON A CUT

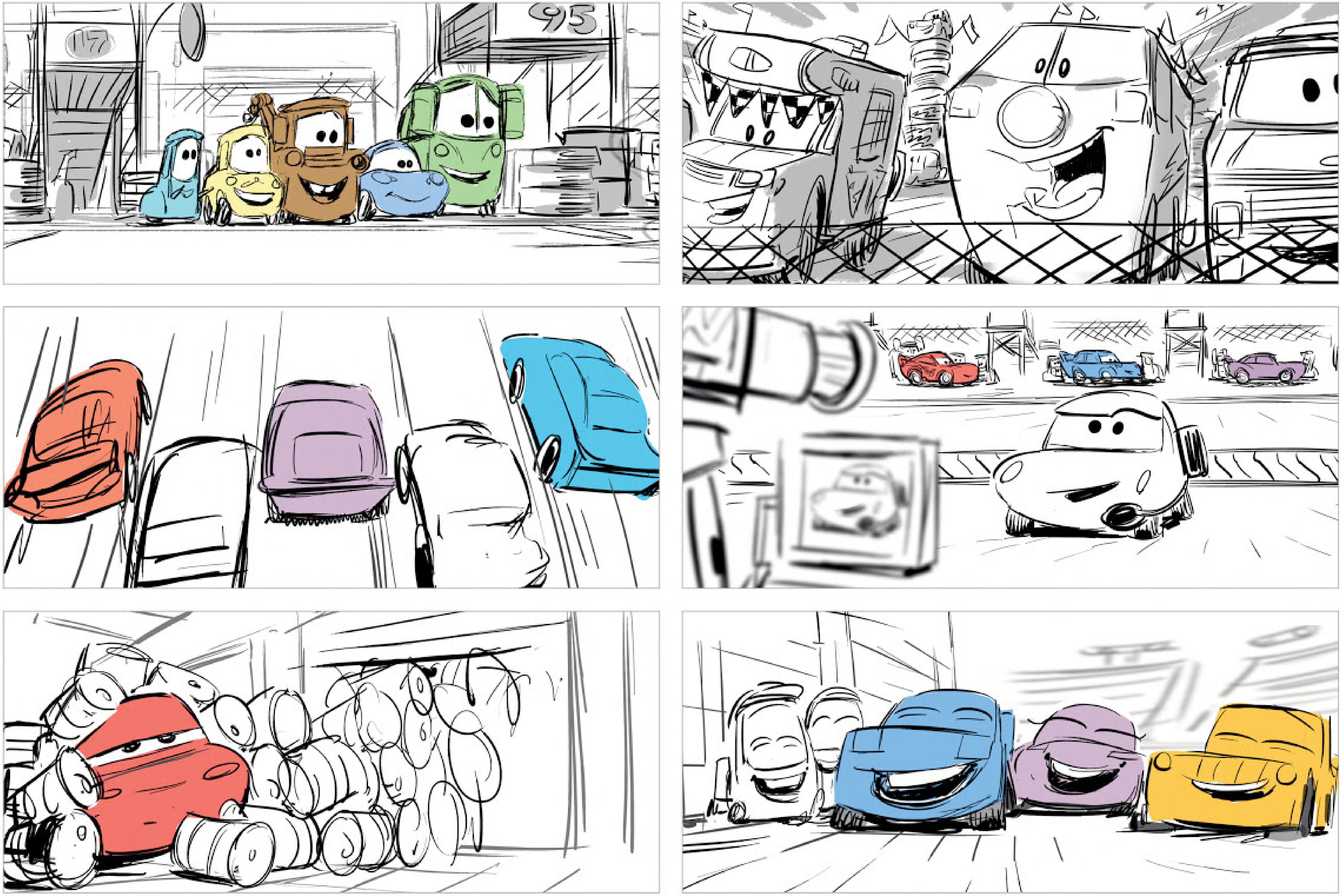

RAISE HORIZON
ACTIVE SPACE
EYELINE
ACTIVE SPACE
EYELINE
ACTIVE SPACE
EYELINE
ACTIVE SPACE
EYELINE


IN MEMORY OF
DOC HUDSON
1951-2009
HE HAD ALOT OF STUFF

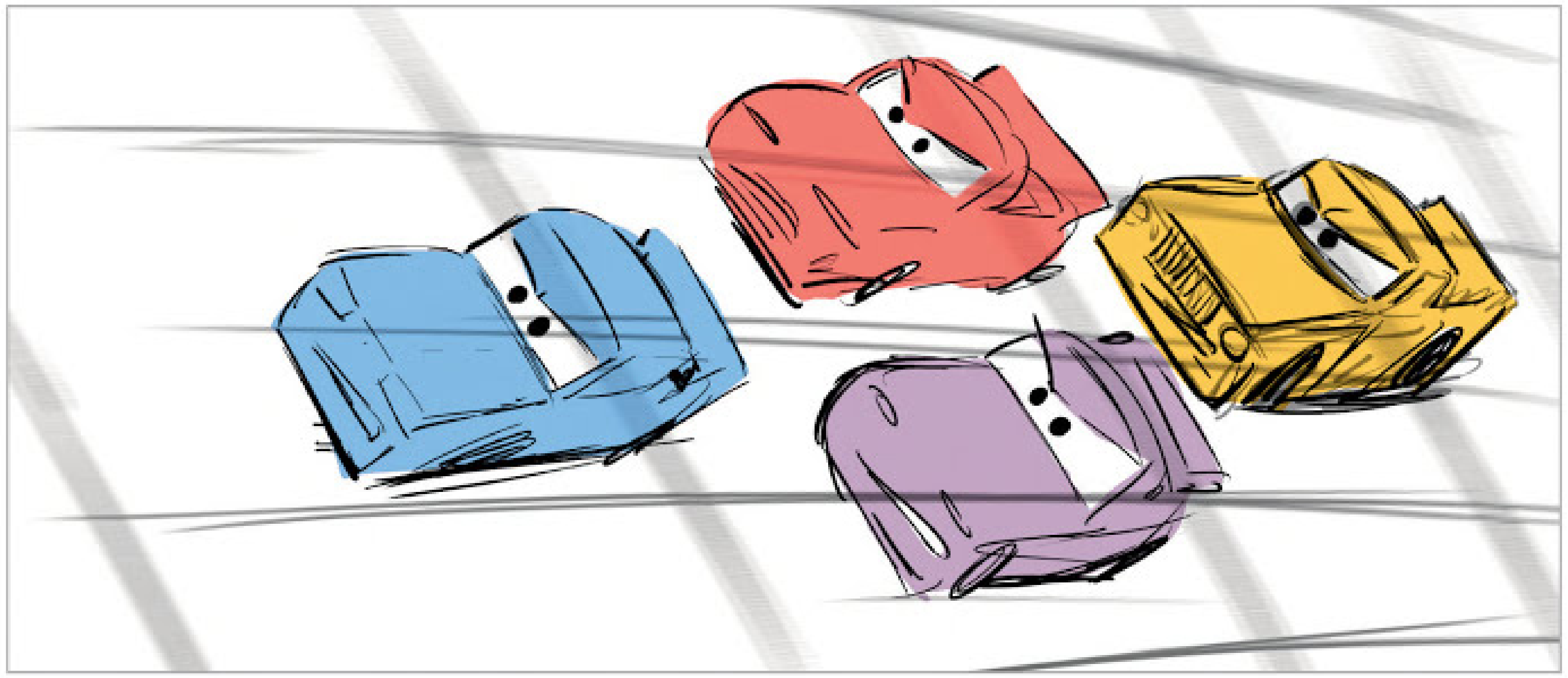
BILL CONE Digital

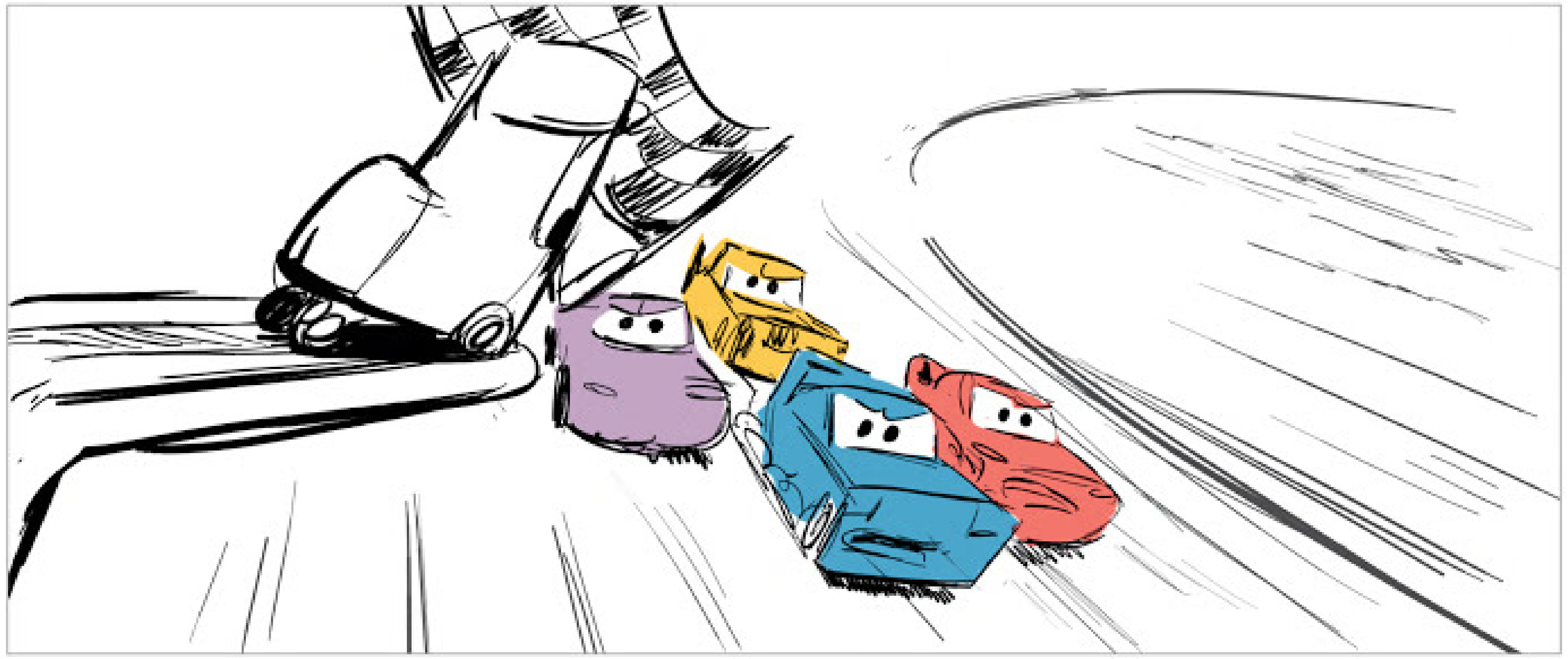
ACT ONE

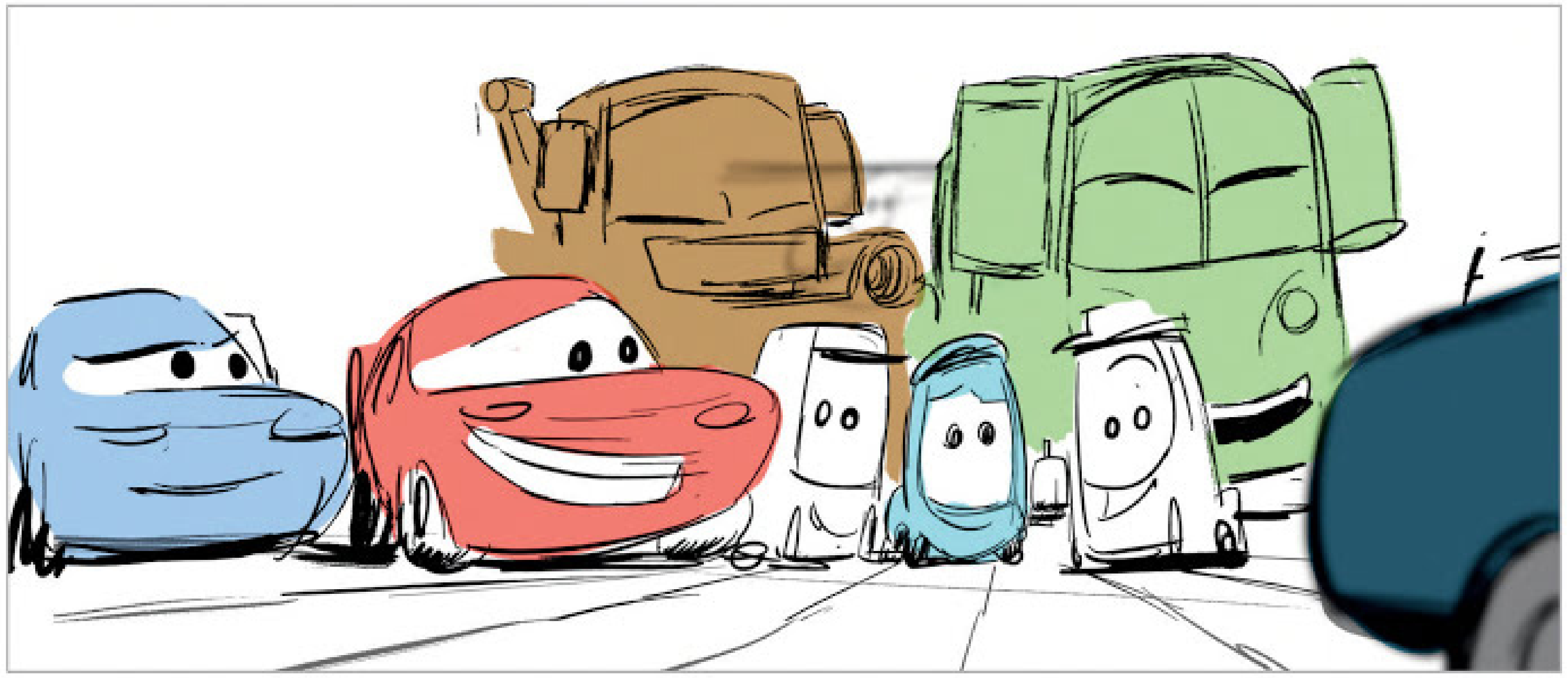




JP VINE, SCOTT MORSE, AND TONY ROSENAST Storyboards; (opposite) **JP VINE** Storyboards





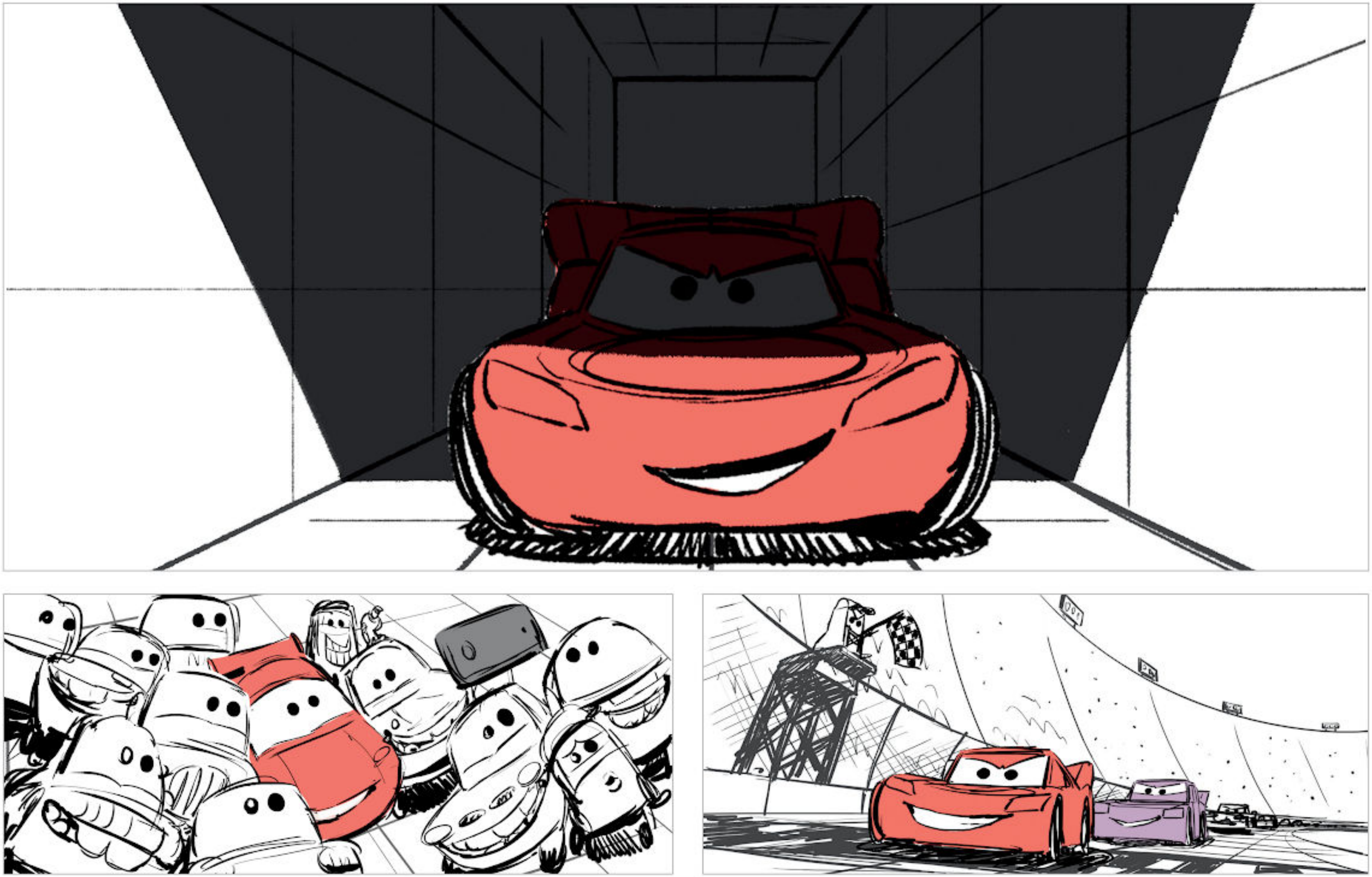


CHAMP MCQUEEN

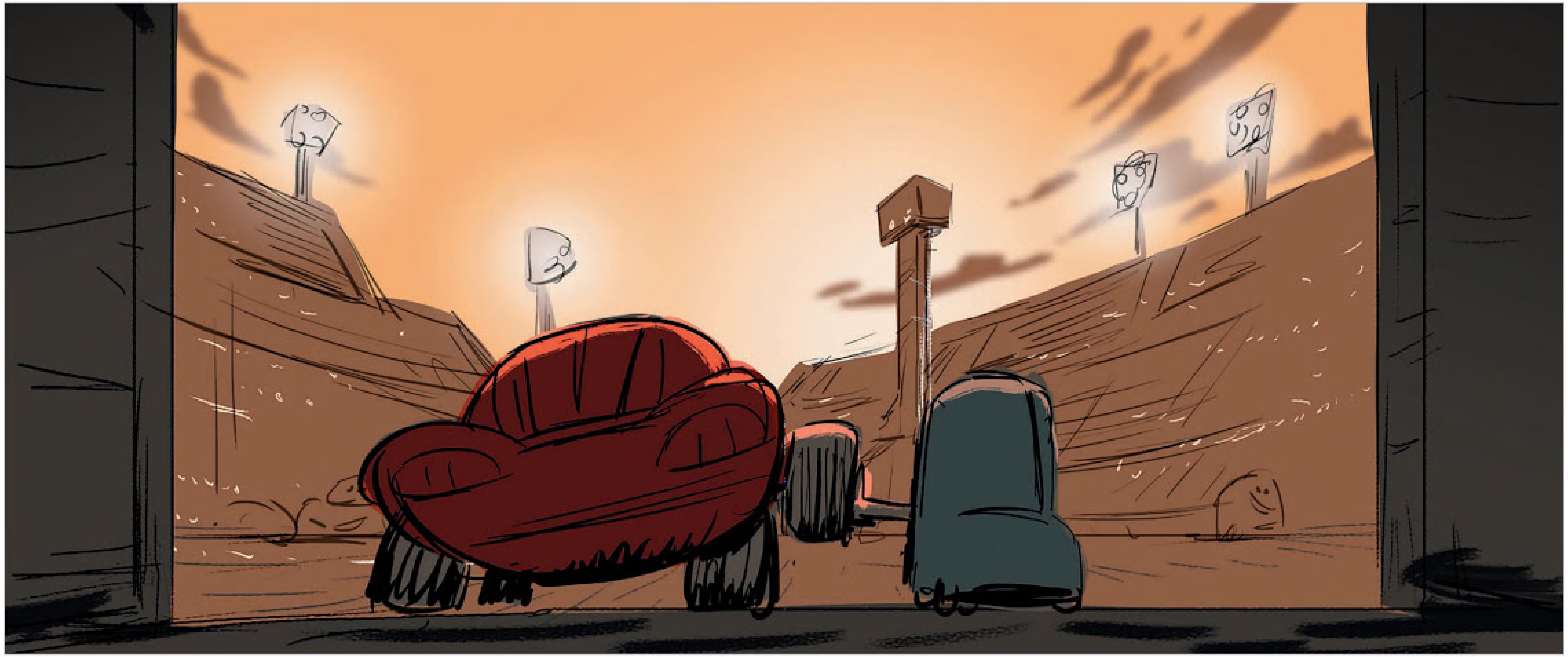
The film opens with an exuberant burst of racing, reintroducing McQueen at the top of his game. The goal was to immerse the audience in the excitement of racing and show the camaraderie between racers. It can be bewildering to know how to begin, but having a temporary piece of music helps set the tempo. Then I'll thumbnail, usually discarding tons of shots until it starts to flow and build in the right way.

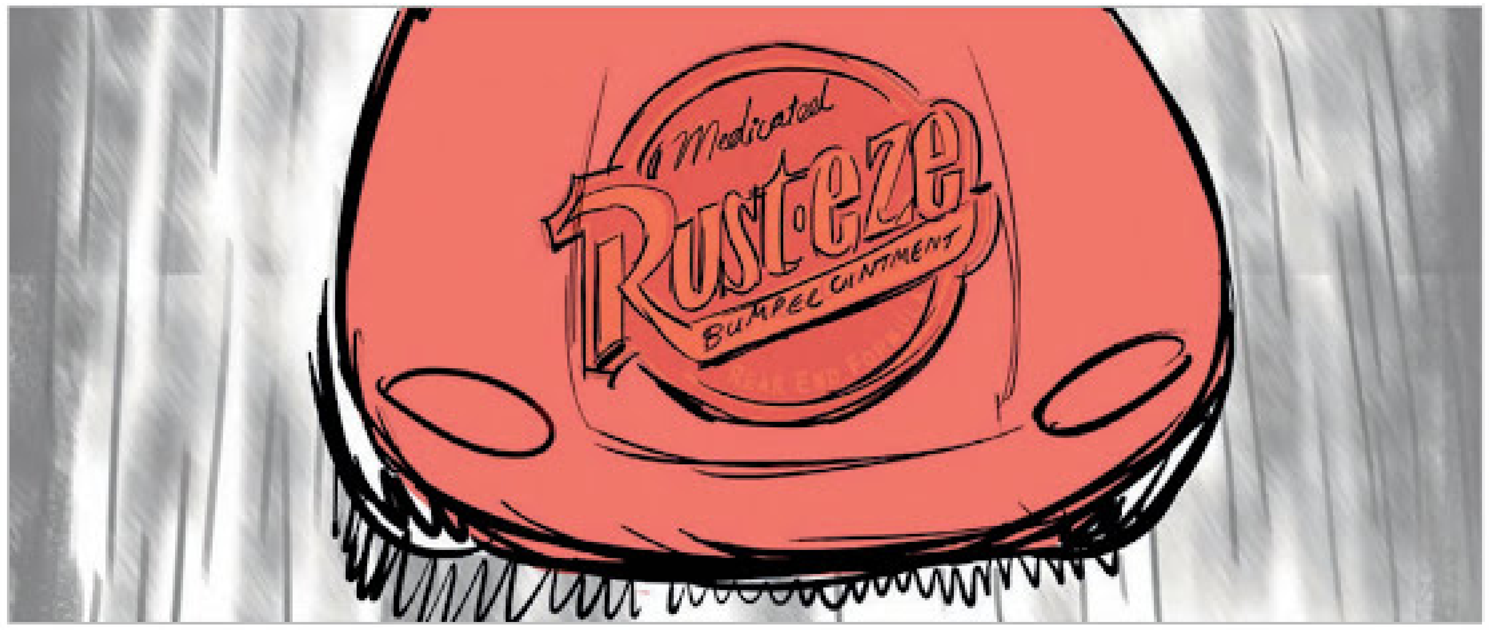
It's a blast to work on fast racing scenes, trying to place the camera and the viewer in the thick of the action. A lot of artists worked together on this, building on and pushing the sequence each time. It's this collaborative process that I love.

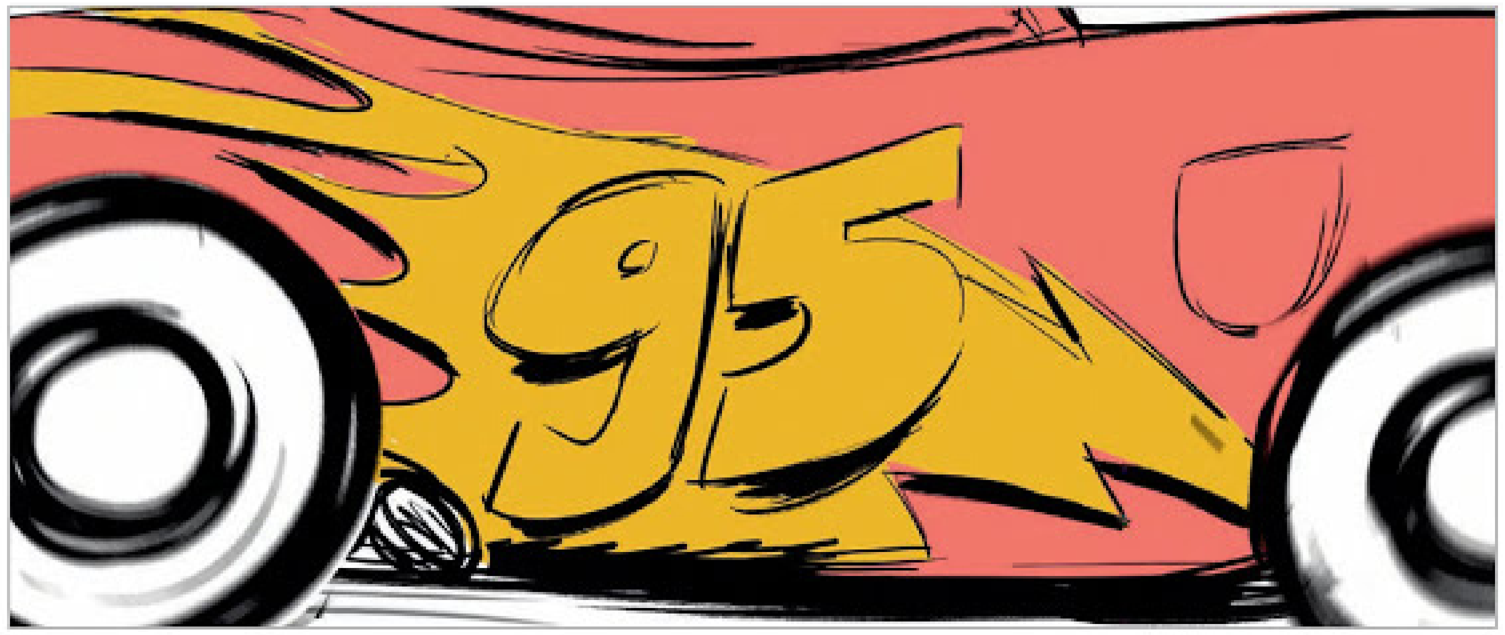
—**JP VINE,** Story Artist

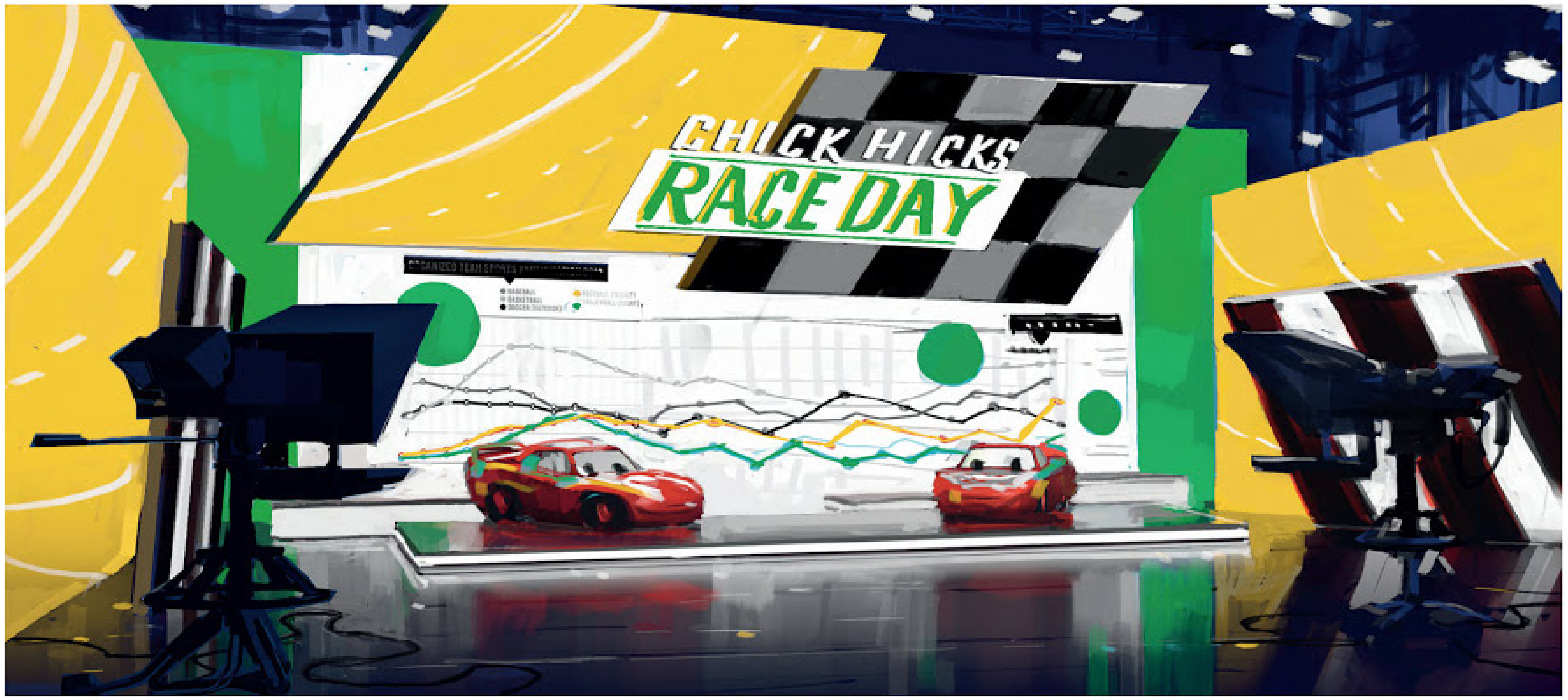


JP VINE AND JOHN HOFFMAN Storyboards; (opposite) **JP VINE** Storyboards




Medicated
Rust-eze
BUMPER OINTMENT
REAR END

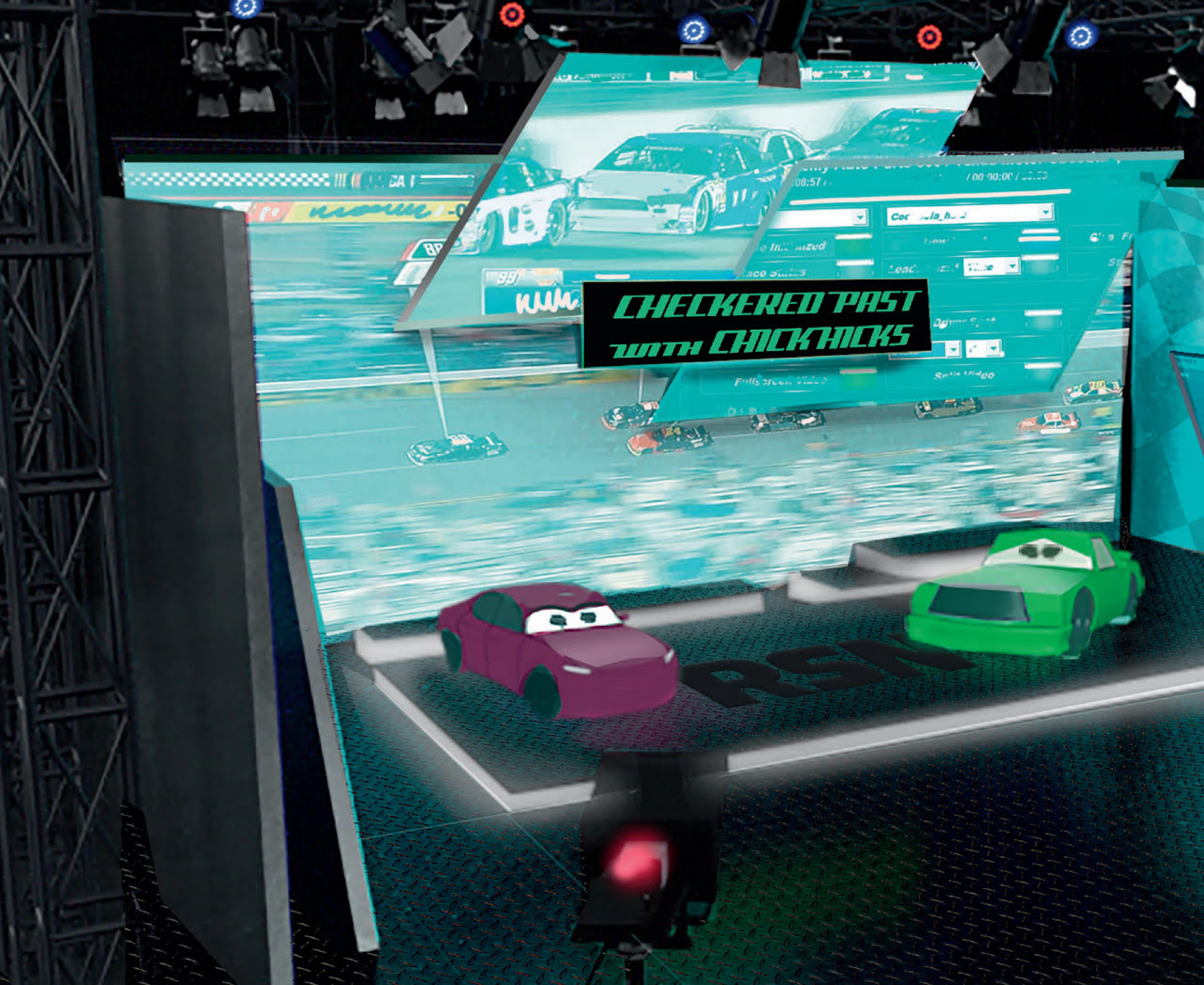

95

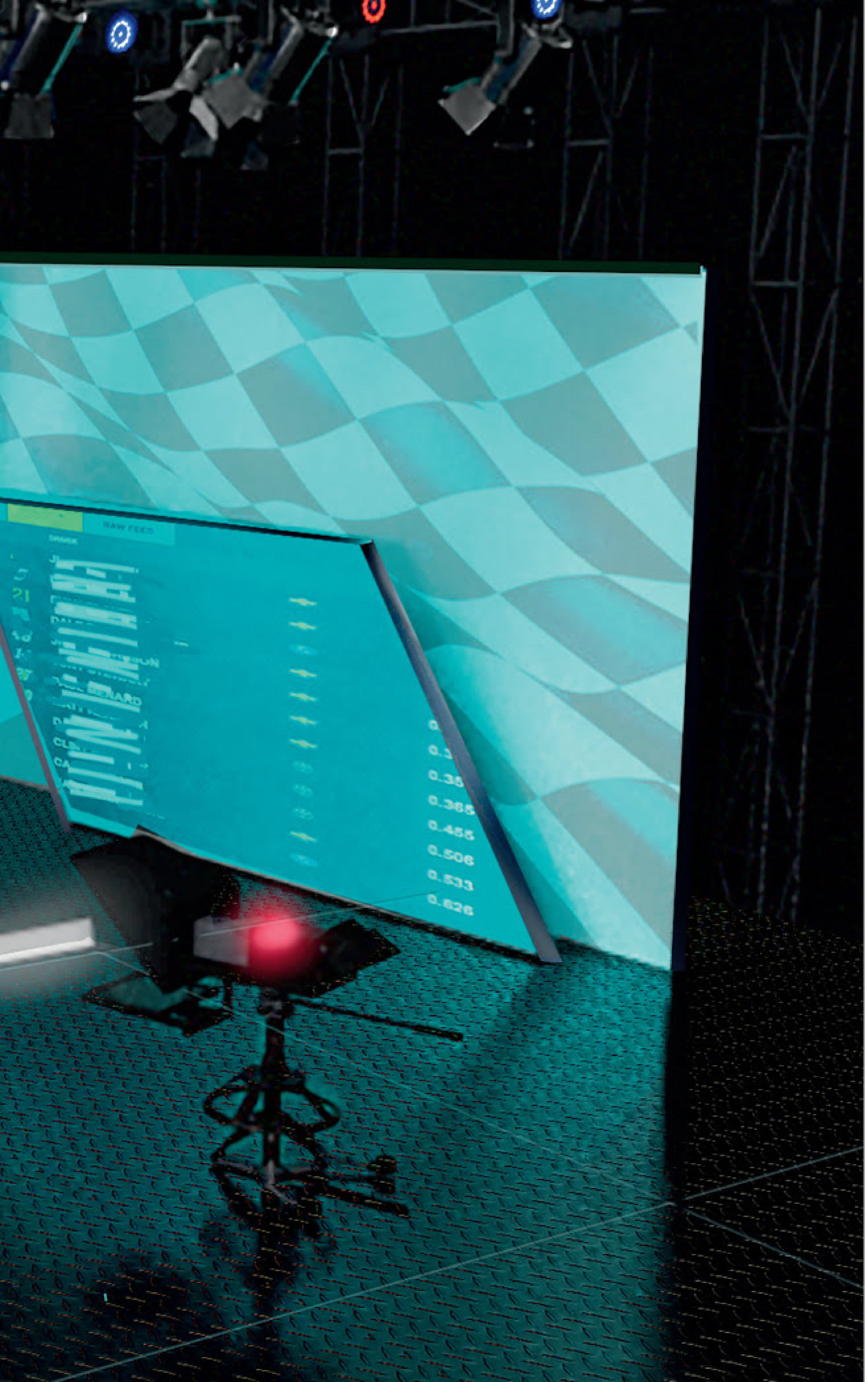

CHICK HICKS
RACE DAY

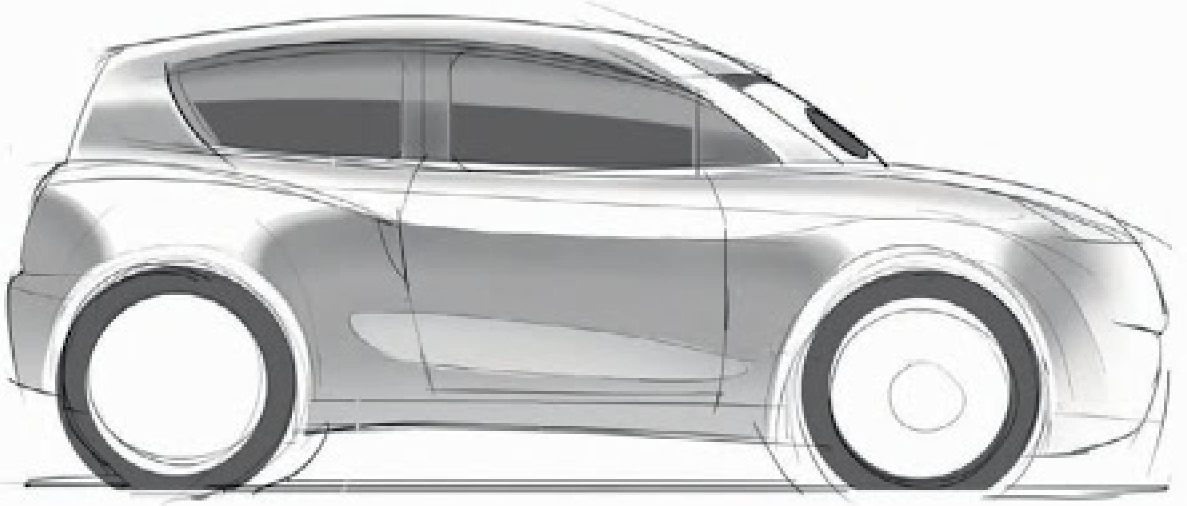
Chick Hicks
86
Chick Hicks
86
Chick Hicks
TankCoat
WAXY WAX
Bumper Save
easy idle
TOW CAP
Fiber Fuel
CLUTCH+AID
LIL' TORQUEY PISTONS
Leak Less
NITROADE
MOOD SPRINGS
Transberry Juice
RPM
VIEW ZEEN
YUM
RETREAD
Octane Gain
Varoom
Gask-its
Spare Mint
Trunk Fresh
Tank Coat
Motor Oil
#1

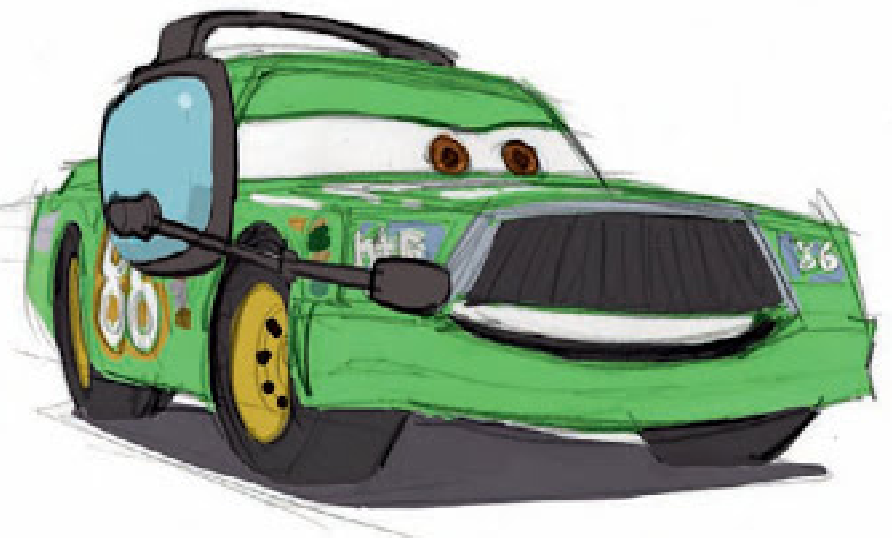
CHICK'S PICKS
CHICK
HICKS
RSN
86
86
PISTON
CUP

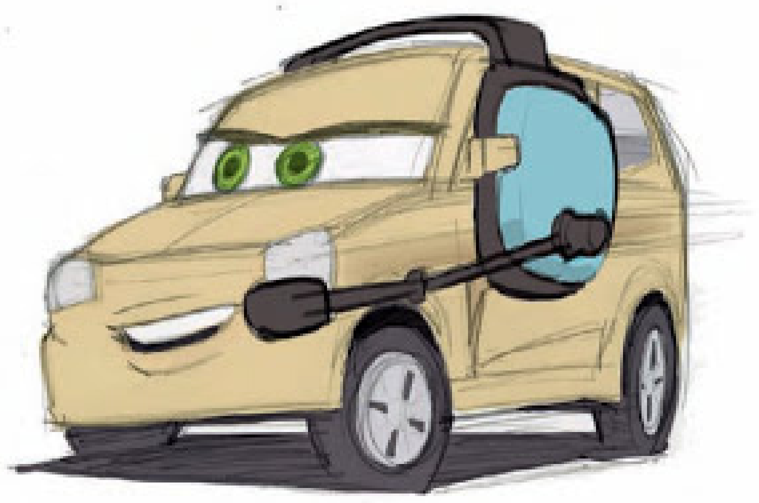
CATHERINE KELLY Digital render; (opposite top) **NOAH KLOCEK** Digital; (opposite bottom) **CRAIG FOSTER** Digital

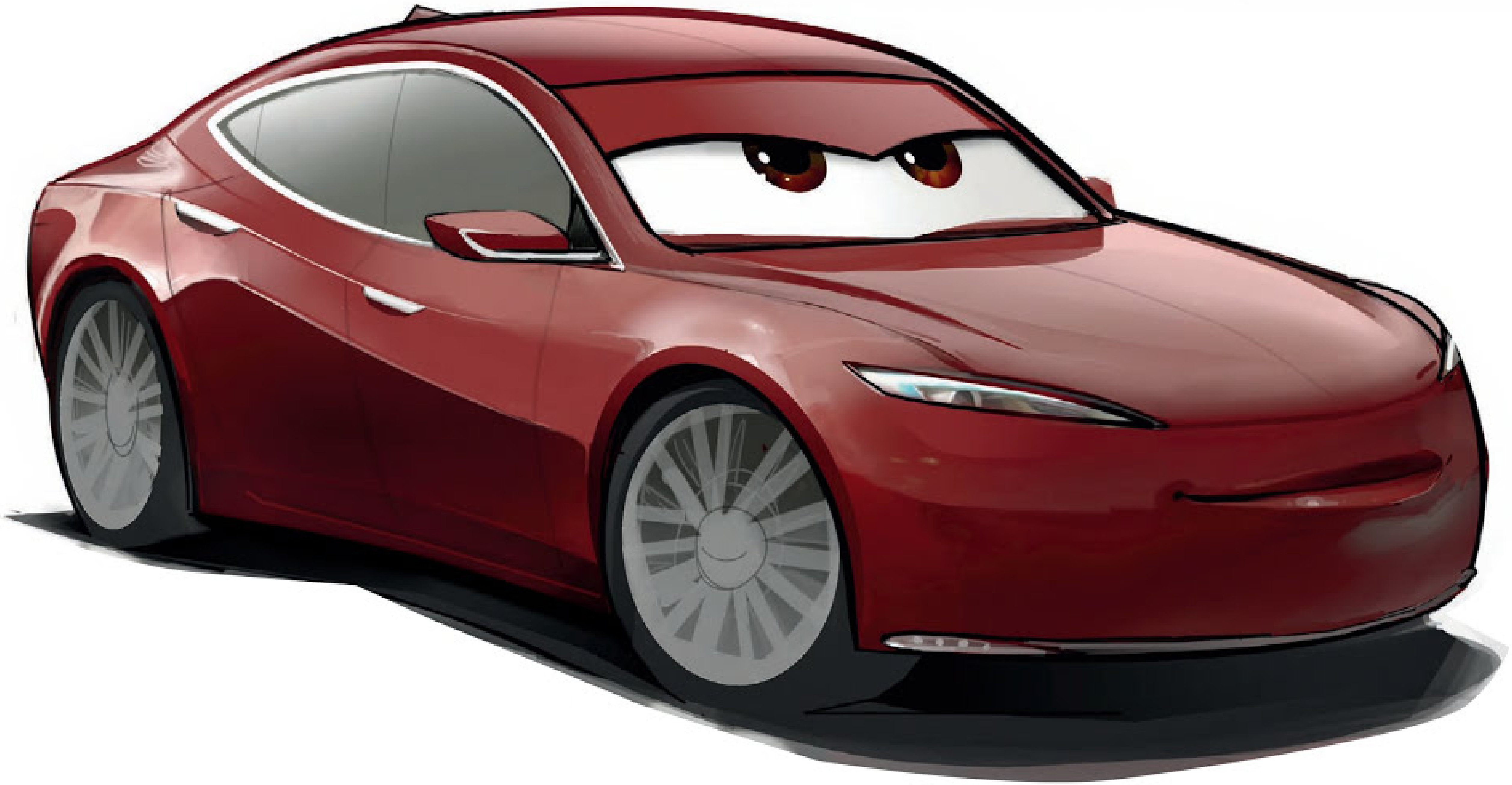

CHECKERED PAST
with CHICK HICKS
RSN



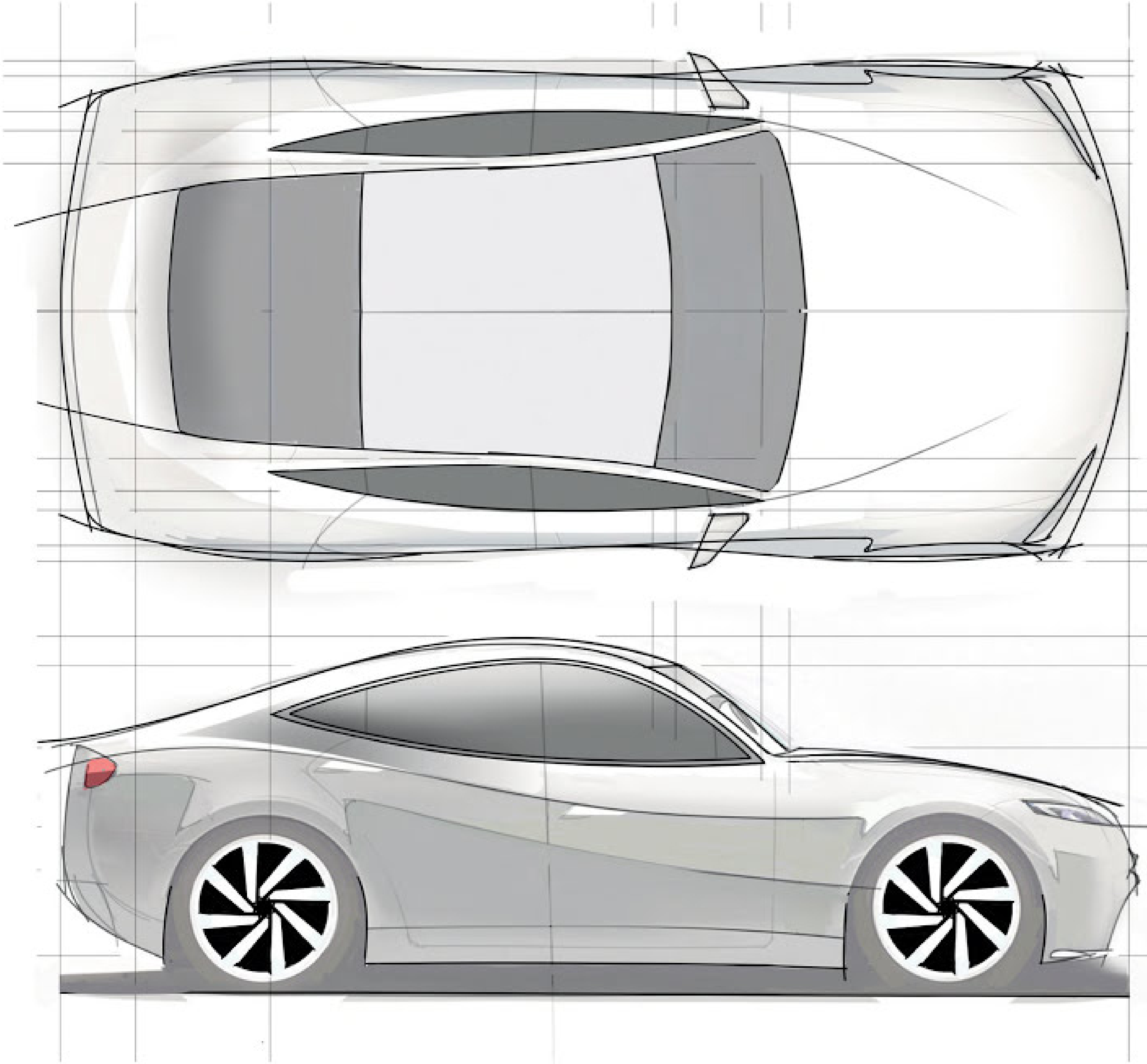


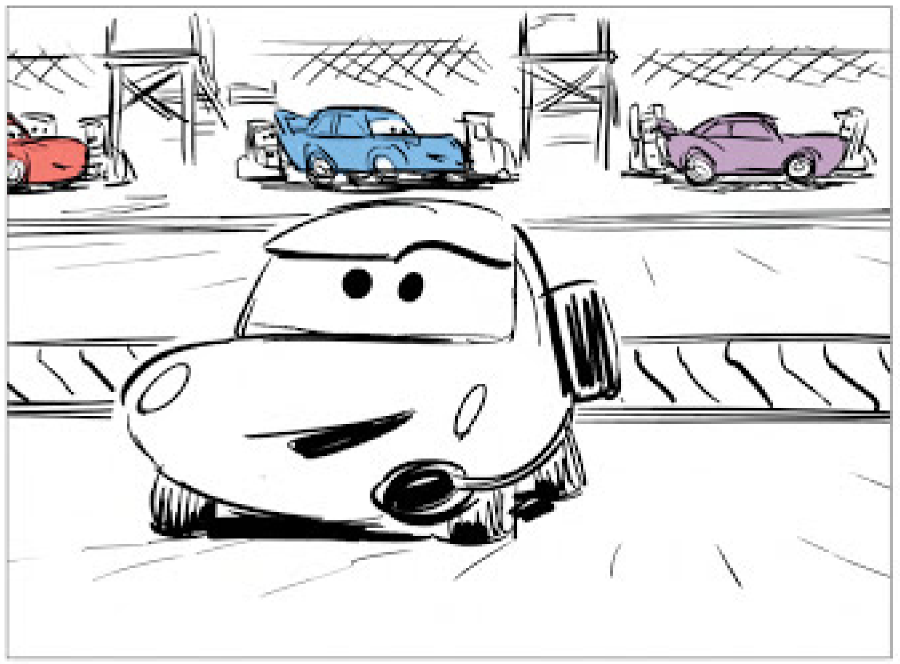


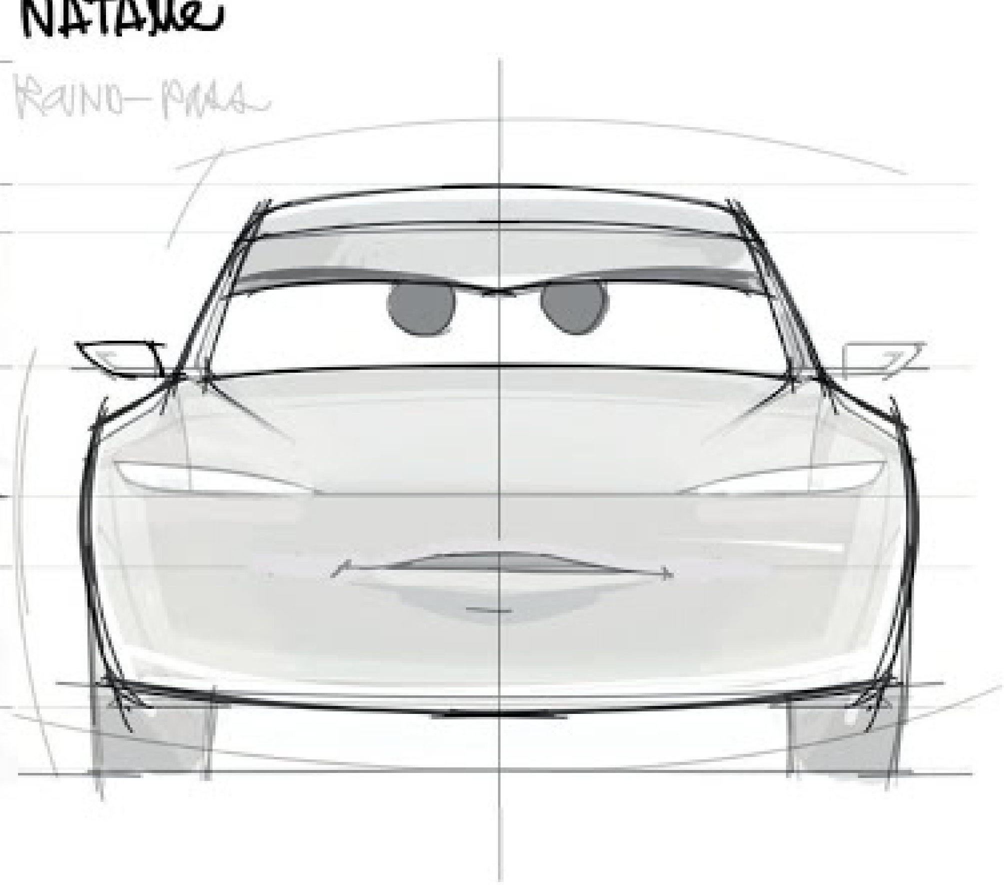




NATALIE CERTAIN

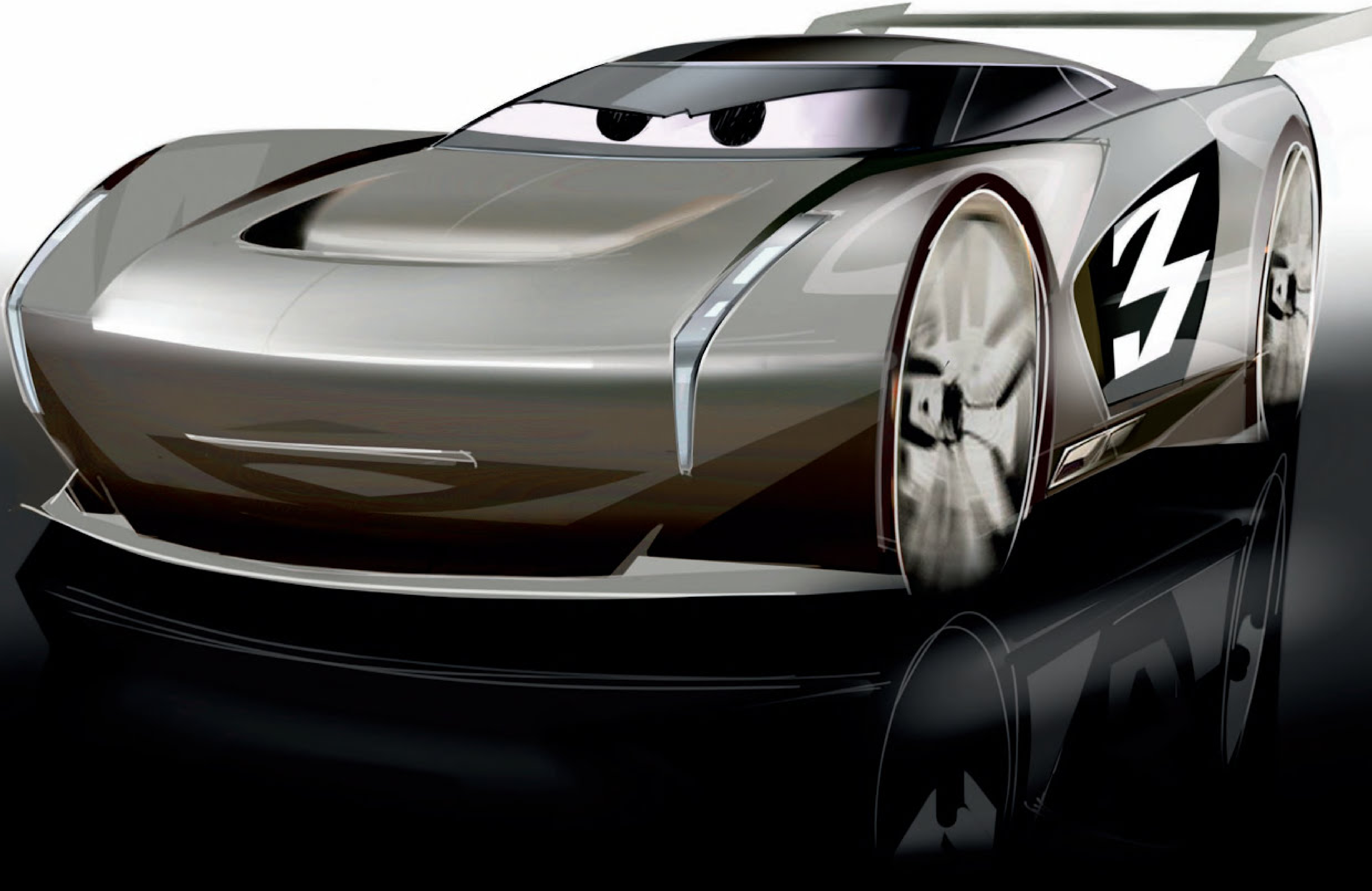


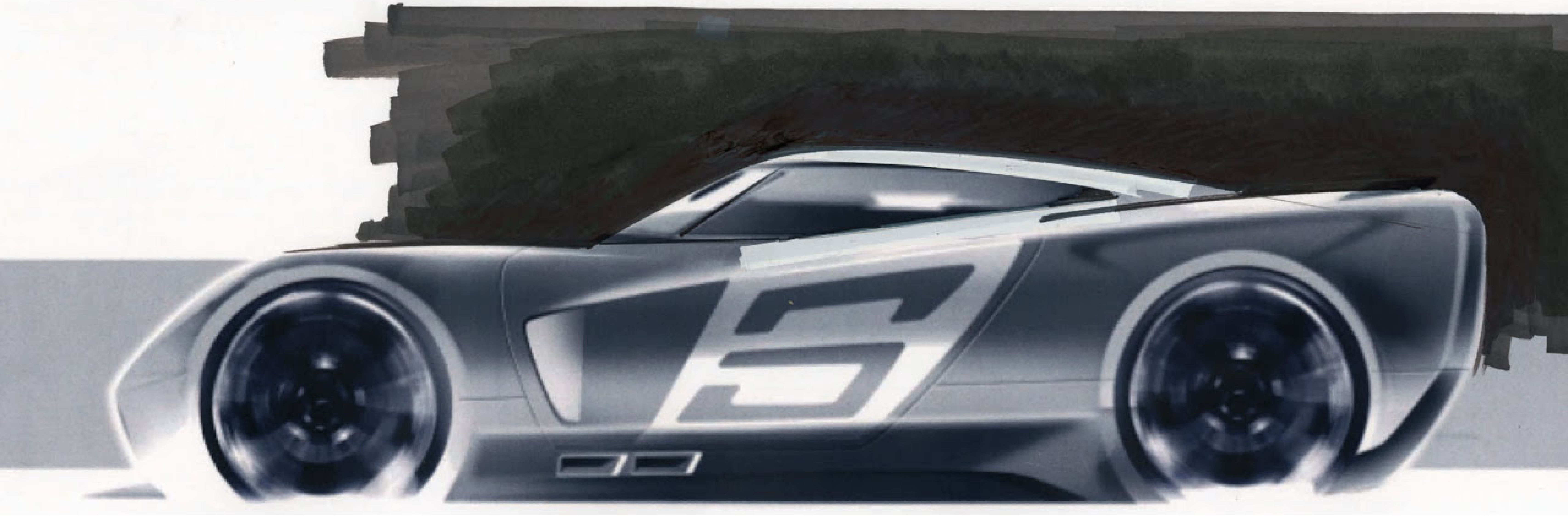


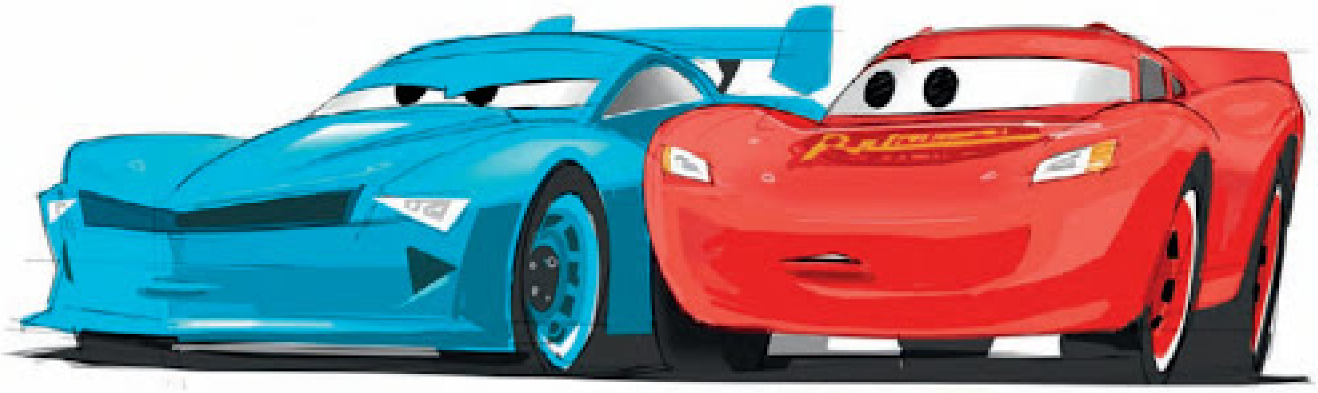


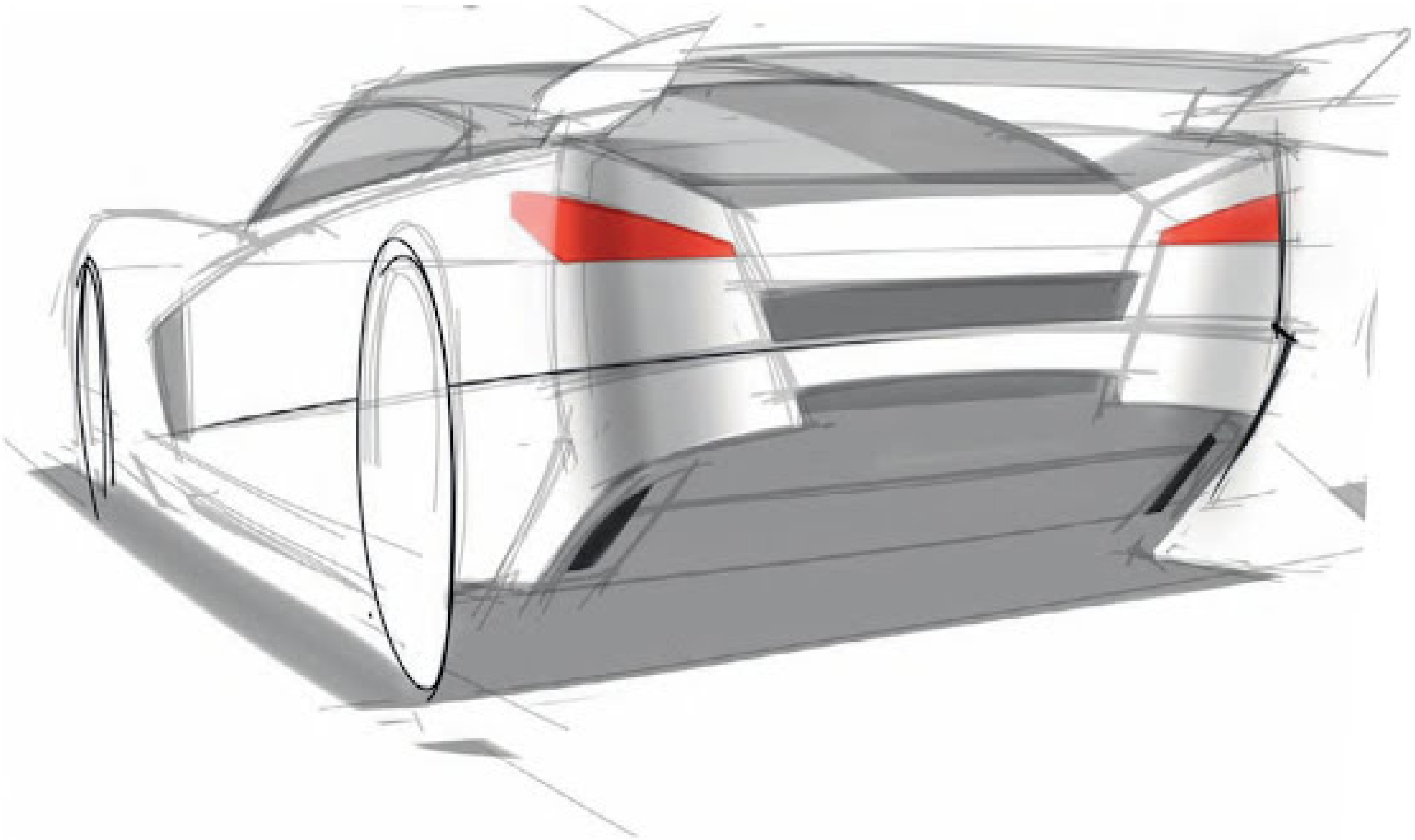
(opposite, top row) **GRANT ALEXANDER** Digital;
(opposite, bottom) **GARRET TAYLOR** Digital;
(above) **JAY SHUSTER** Digital;
(above, far right) **JP VINE AND SCOTT MORSE** Storyboard

STORM

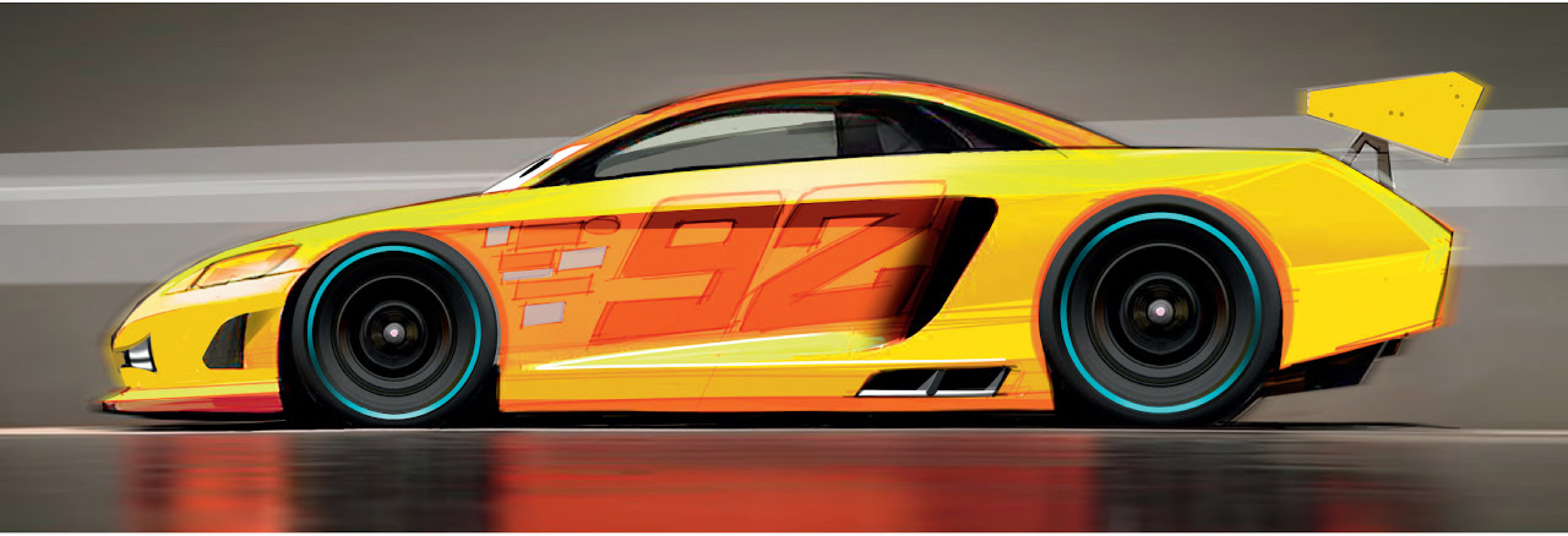




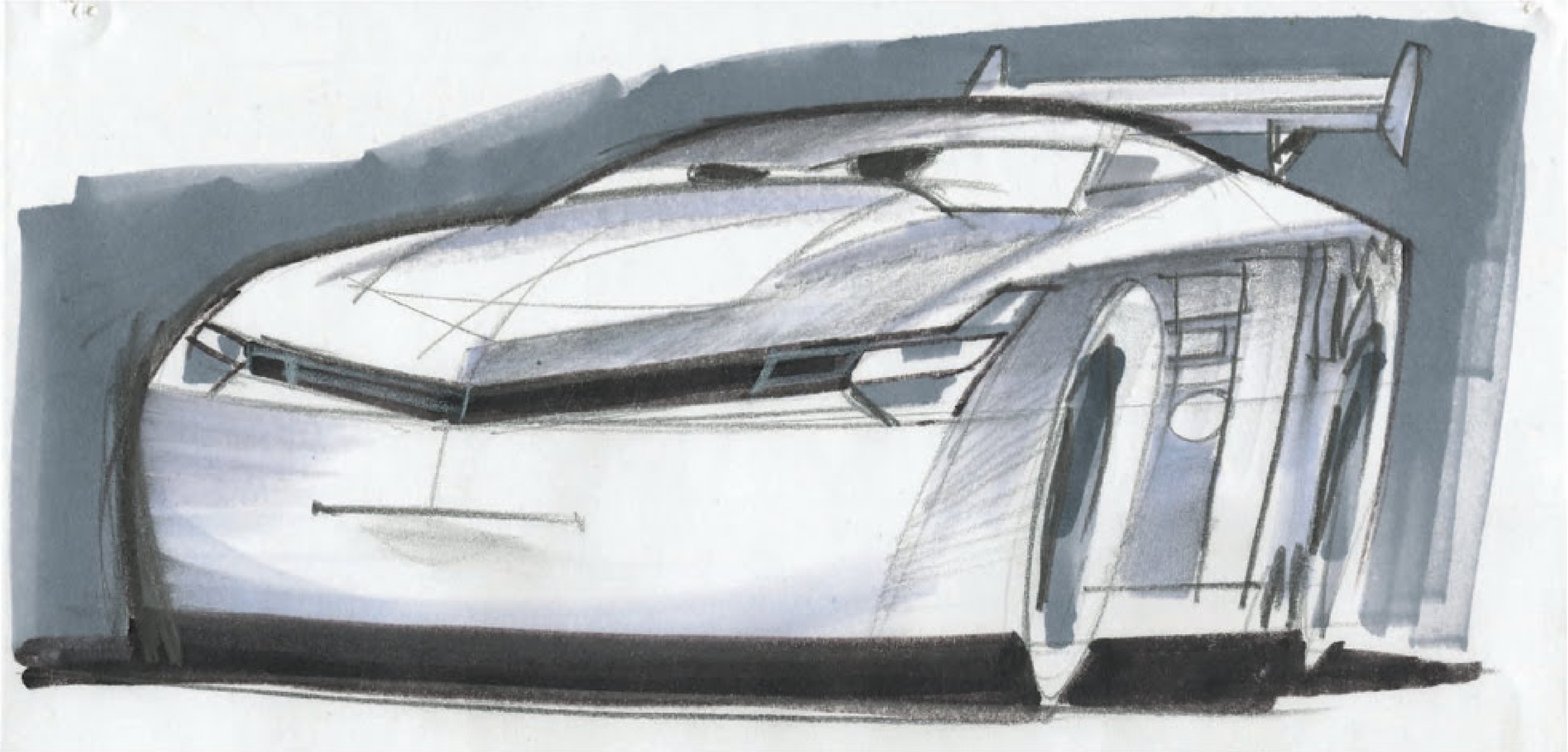


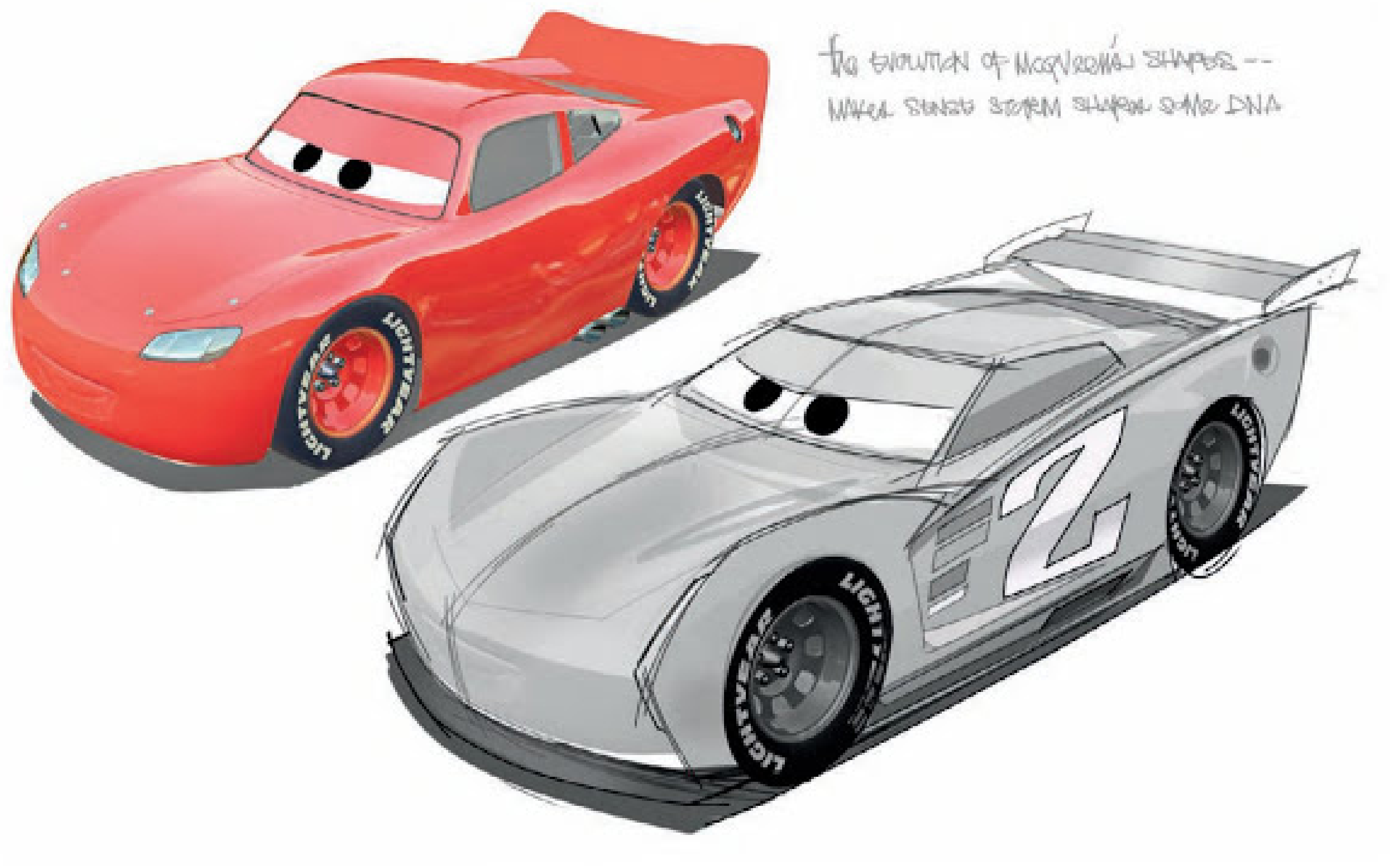


(top) **J MAYS** Digital; (above) **JAY SHUSTER** Digital;
(right) **JAY SHUSTER** Digital; (opposite) **JAY SHUSTER** Digital



JAY SHUSTER Digital;
(opposite top) **JAY SHUSTER** Pencil and marker; (opposite bottom) **JAY SHUSTER** Digital

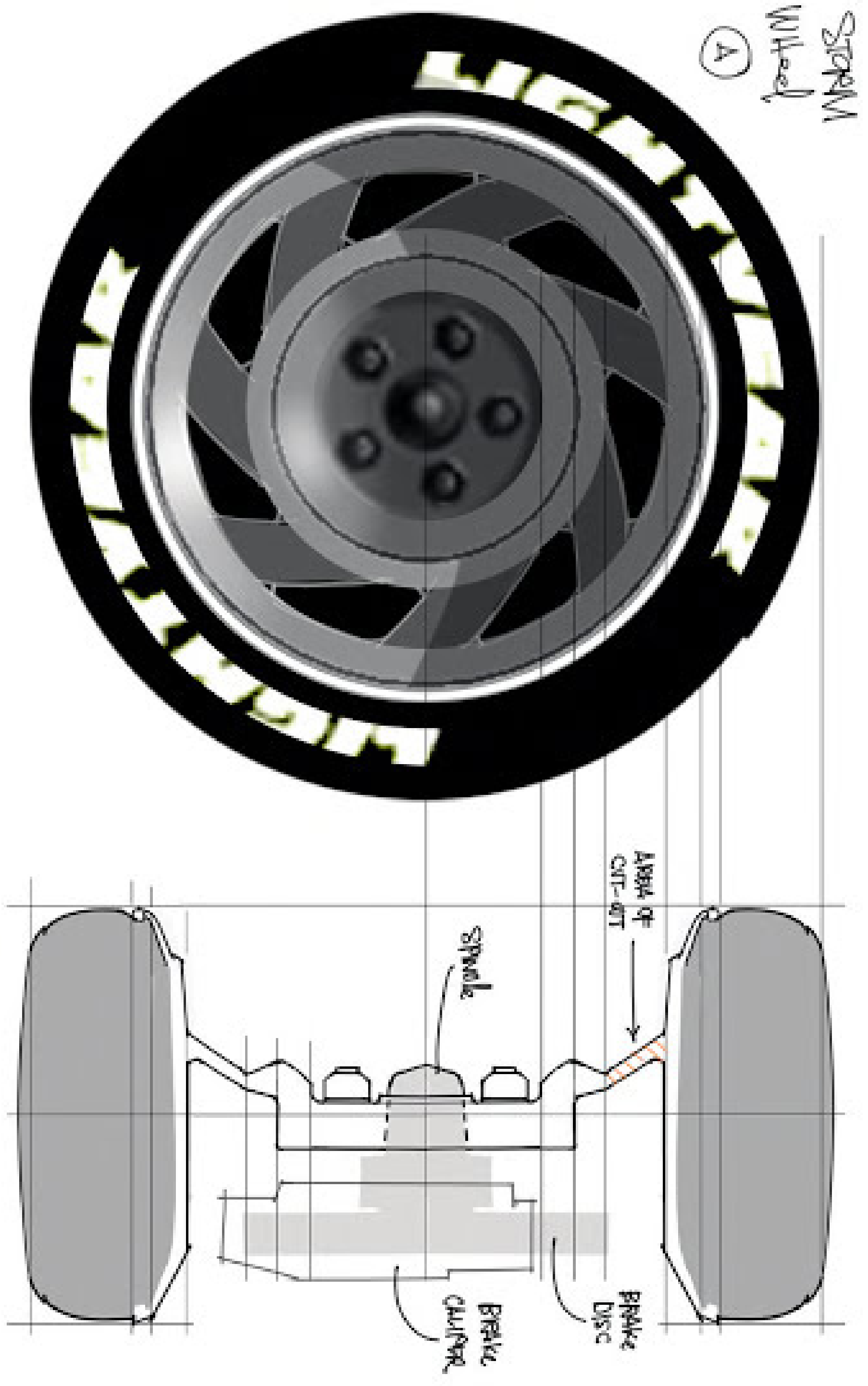


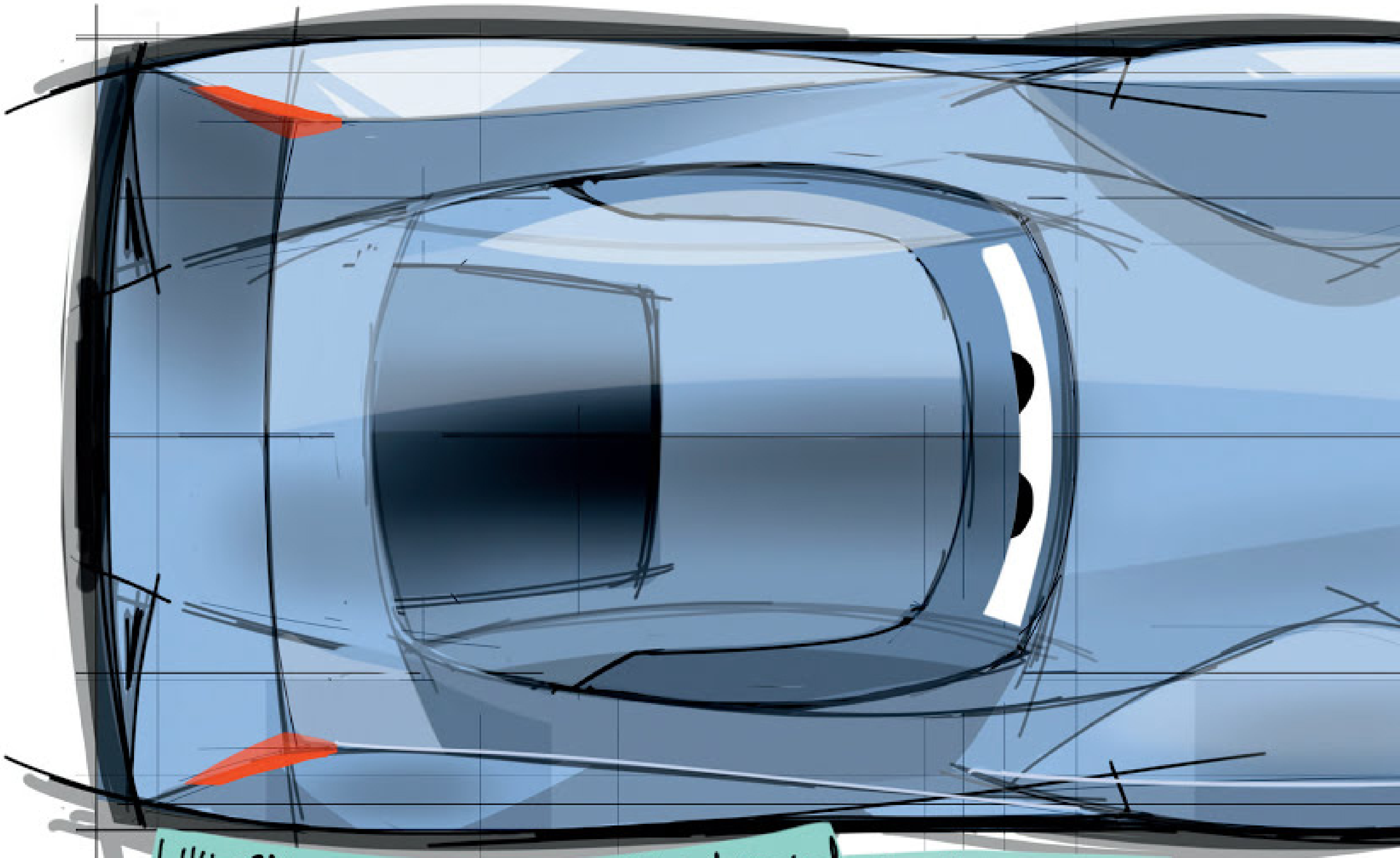

THE EVOLUTION OF McQUEEN'S SHAPES --
MAKES SENSE STORM SHARES SOME DNA
LIGHTYEAR
2

At every turn in the design and model-building of Storm we held McQueen up for comparison. Every aspect of Storm needed to clash with McQueen in an extreme way. Razor-edge creases vs. voluptuous curves. Low slammed profile vs. upright posture. Storm needed to be McQueen's contradiction.

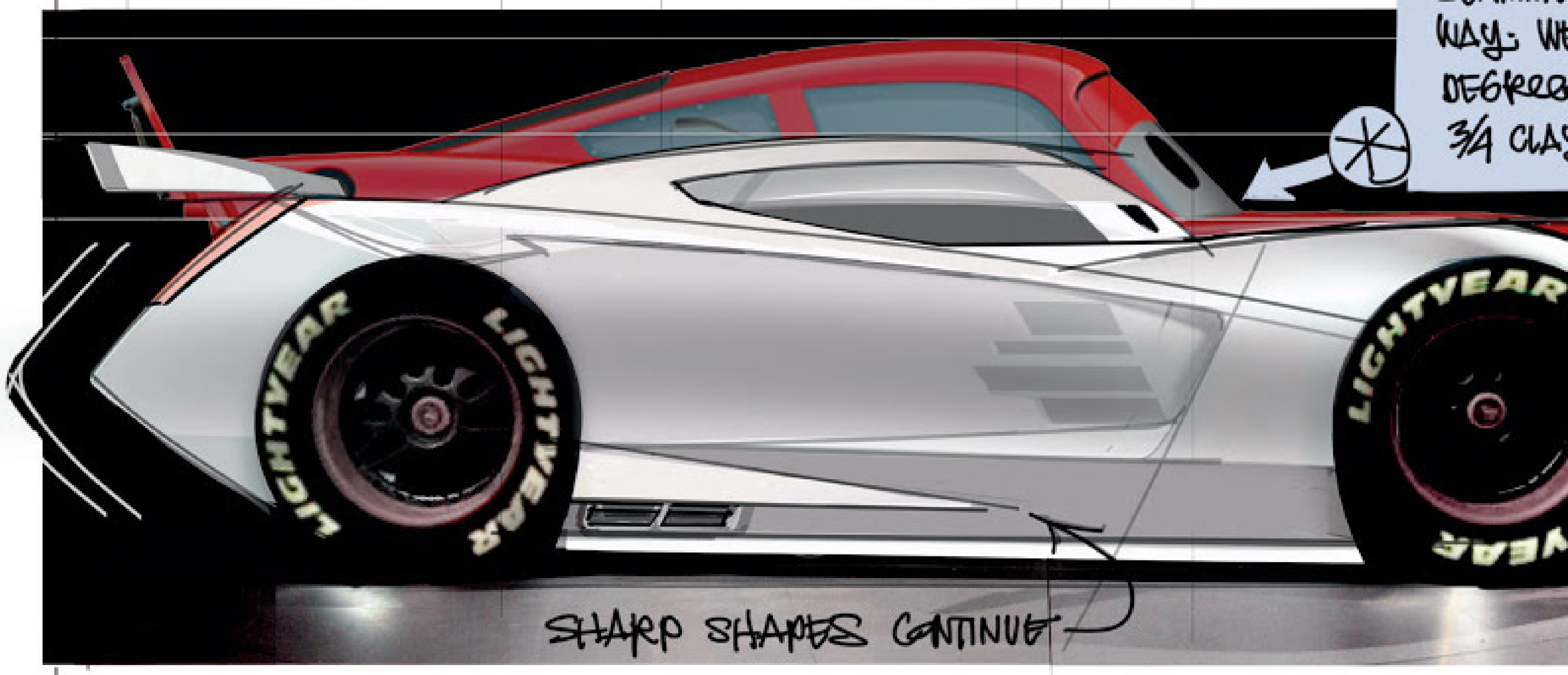
I wanted to give Storm a soul rooted in an alternate stock car universe. I also love the concept of a "Flying Brick"—a traditional stock car look that betrays its high-performance with rigid lines and severe forms. Storm has a massive surface area to plaster his own brash mega-brand onto, paired with forms you'd only see on more extraordinary super-cars.

—**JAY SHUSTER,** Production Designer


Ⓐ
Storm
Wheel
Area of
cut-out
Spindle
Brake
Disc
Brake
Caliper

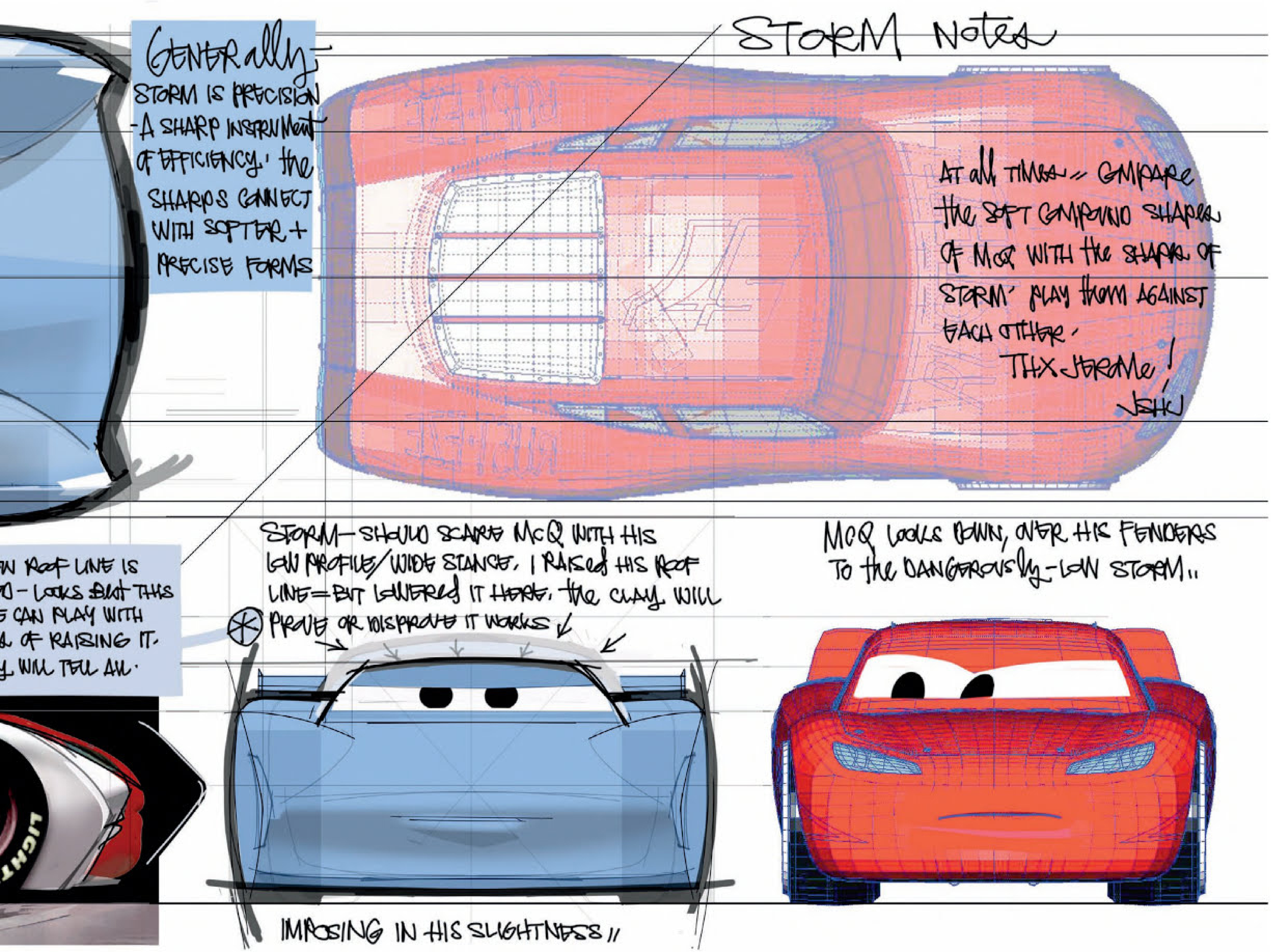


LIKE CRUZ – STORMS LINES ARE FLEXED – BUT MORE TAUGHT UNDER TENSION


LIGHTYEAR
LIGHTYEAR

SIDEVIE
SLAMME
WAY: WH
DEGREE
3/4 CLAS

SHARP SHAPES CONTINUE



STORM Notes

GENERALLY –
STORM IS PRECISION
– A SHARP INSTRUMENT
OF EFFICIENCY. THE
SHARPS CONNECT
WITH SOFTER +
PRECISE FORMS

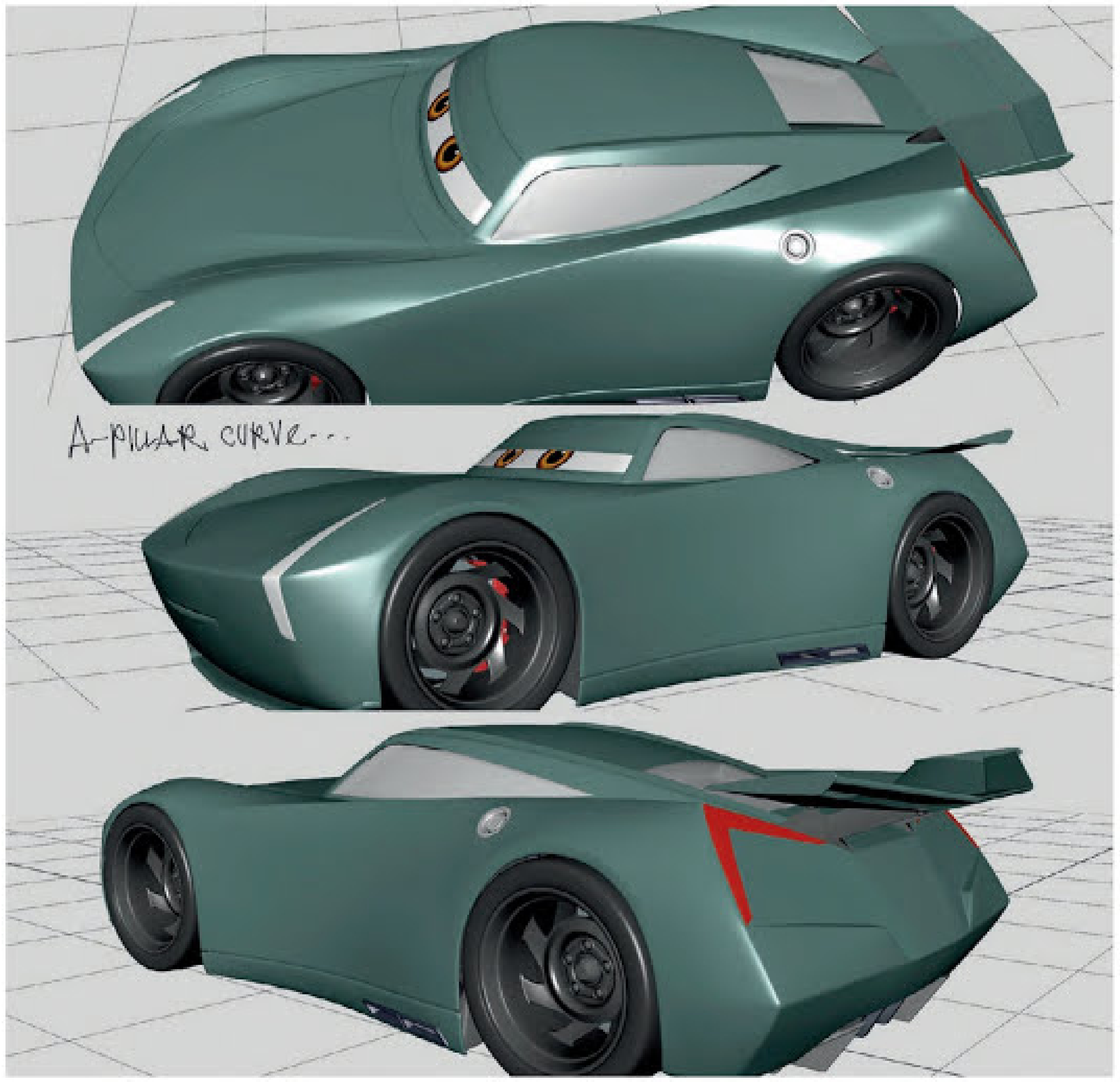
AT ALL TIMES – COMPARE
THE SOFT COMPOUND SHAPES
OF McQ WITH THE SHAPES OF
STORM. PLAY THEM AGAINST
EACH OTHER.
THX JEROME!
JShu

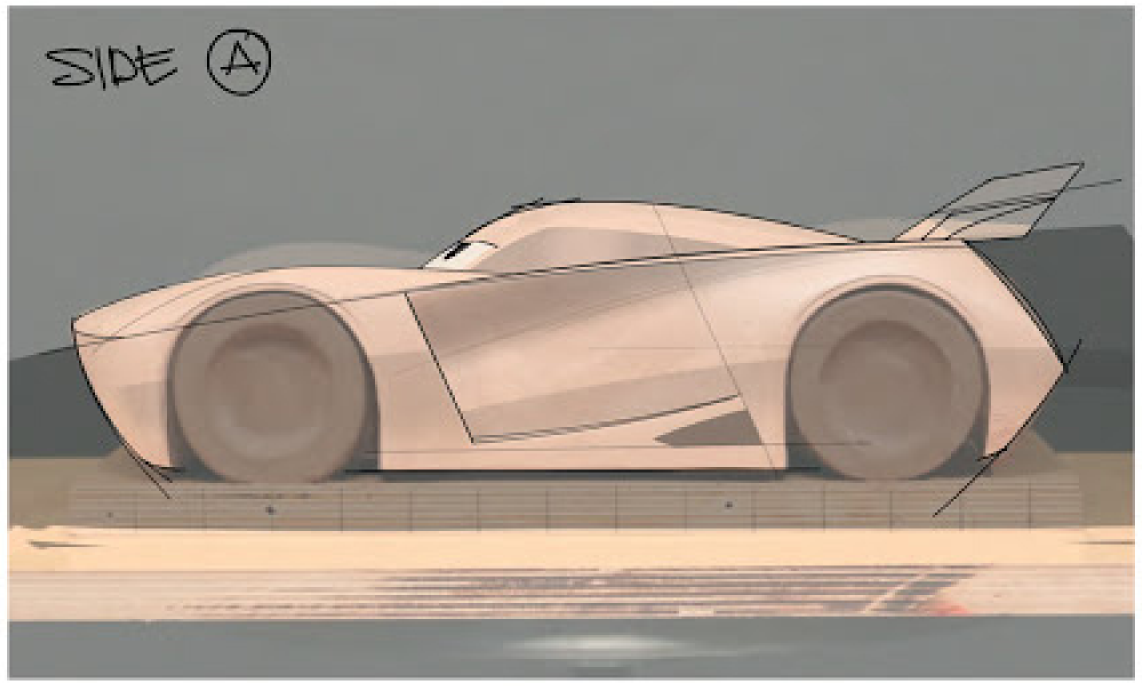
W ROOF LINE IS
D – LOOKS BUT THIS
S CAN PLAY WITH
L OF RAISING IT.
Y WILL TELL ALL.

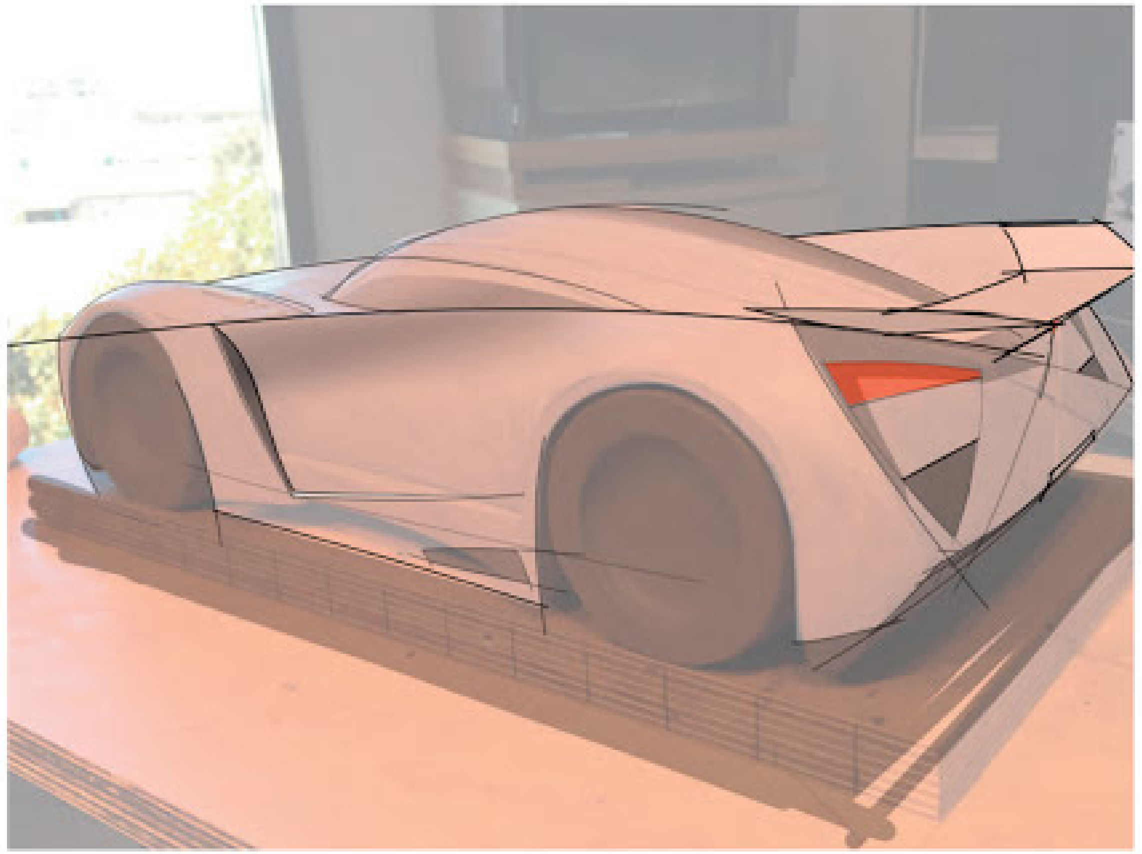
STORM – SHOULD SCARE McQ WITH HIS
LOW PROFILE / WIDE STANCE. I RAISED HIS ROOF
LINE = BUT LOWERED IT HERE. THE CLAY WILL
PROVE OR DISPROVE IT WORKS

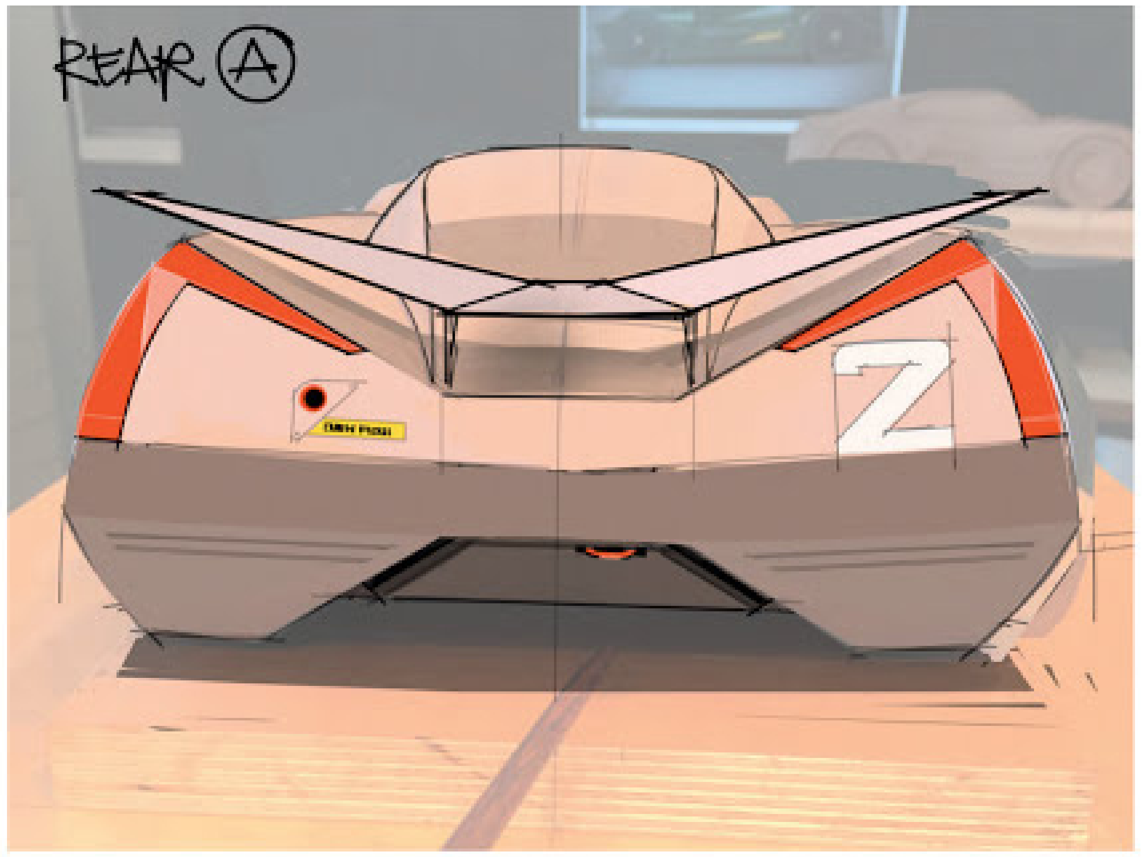
McQ LOOKS DOWN, OVER HIS FENDERS
TO THE DANGEROUSLY-LOW STORM.

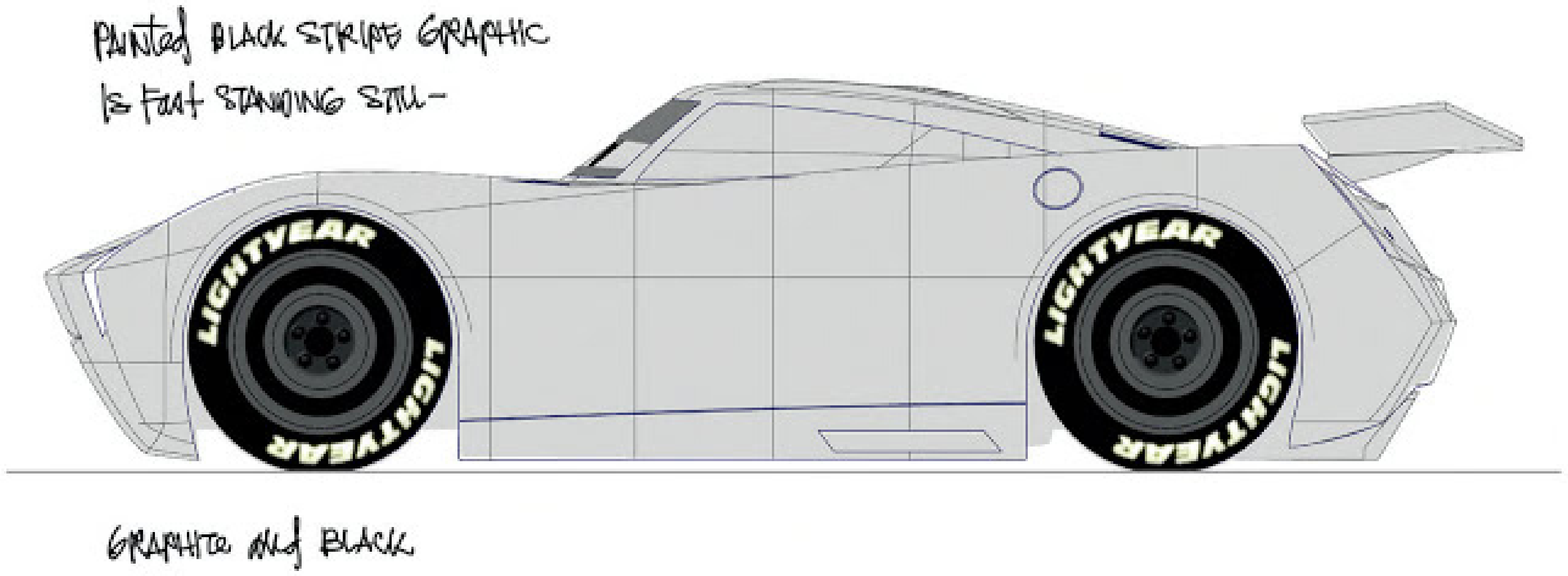
IMPOSING IN HIS SLIGHTNESS.

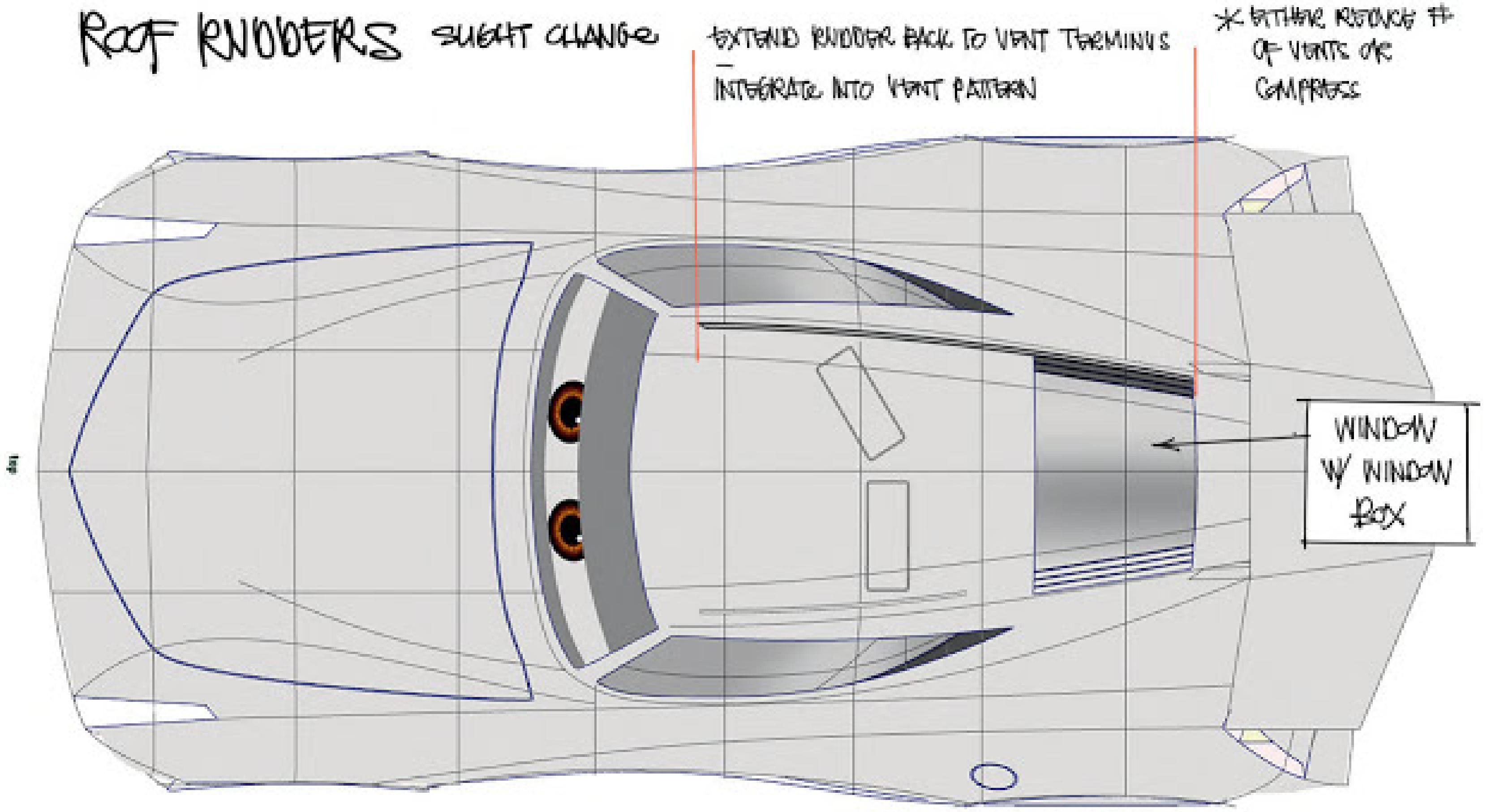

A-PILLAR CURVE...



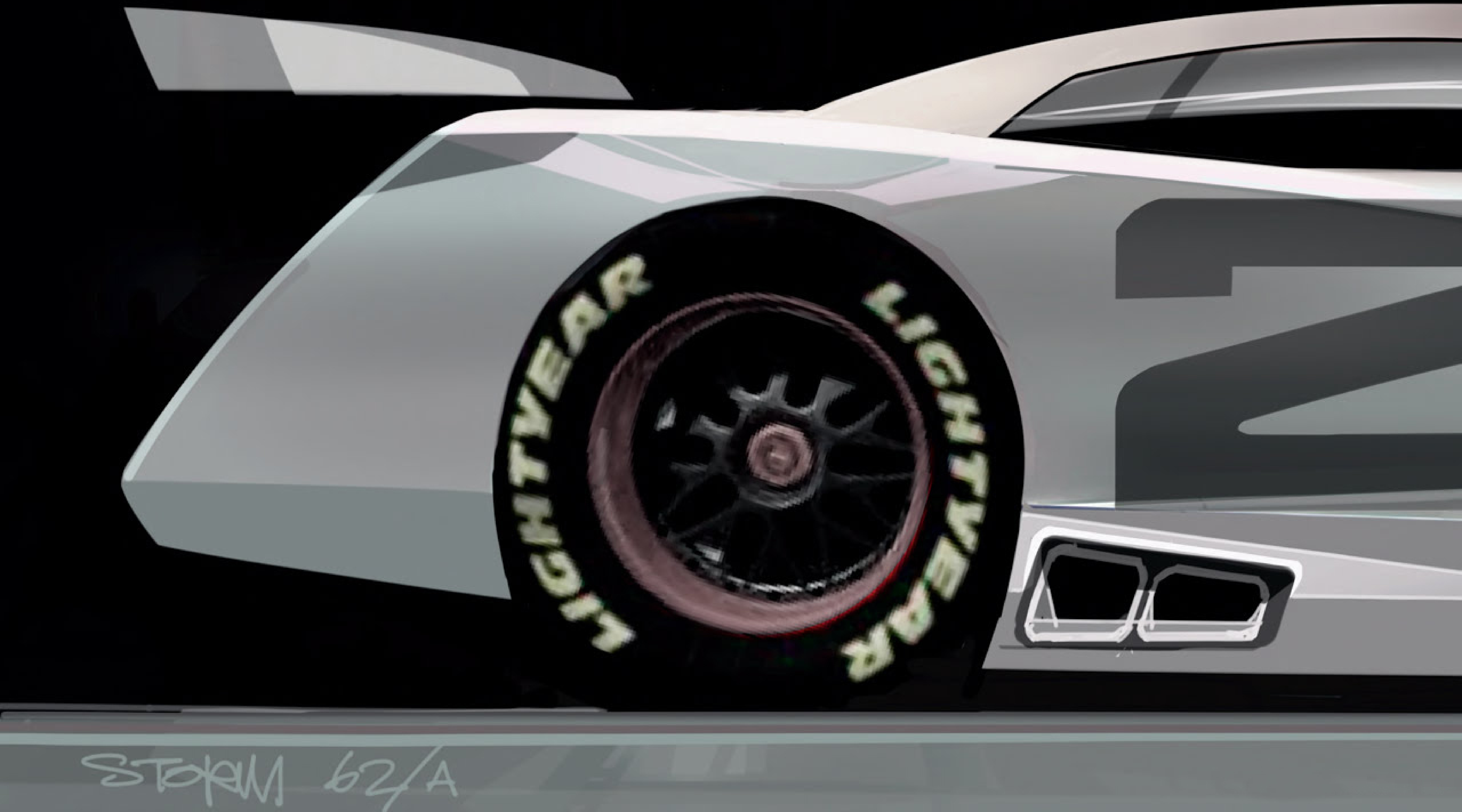


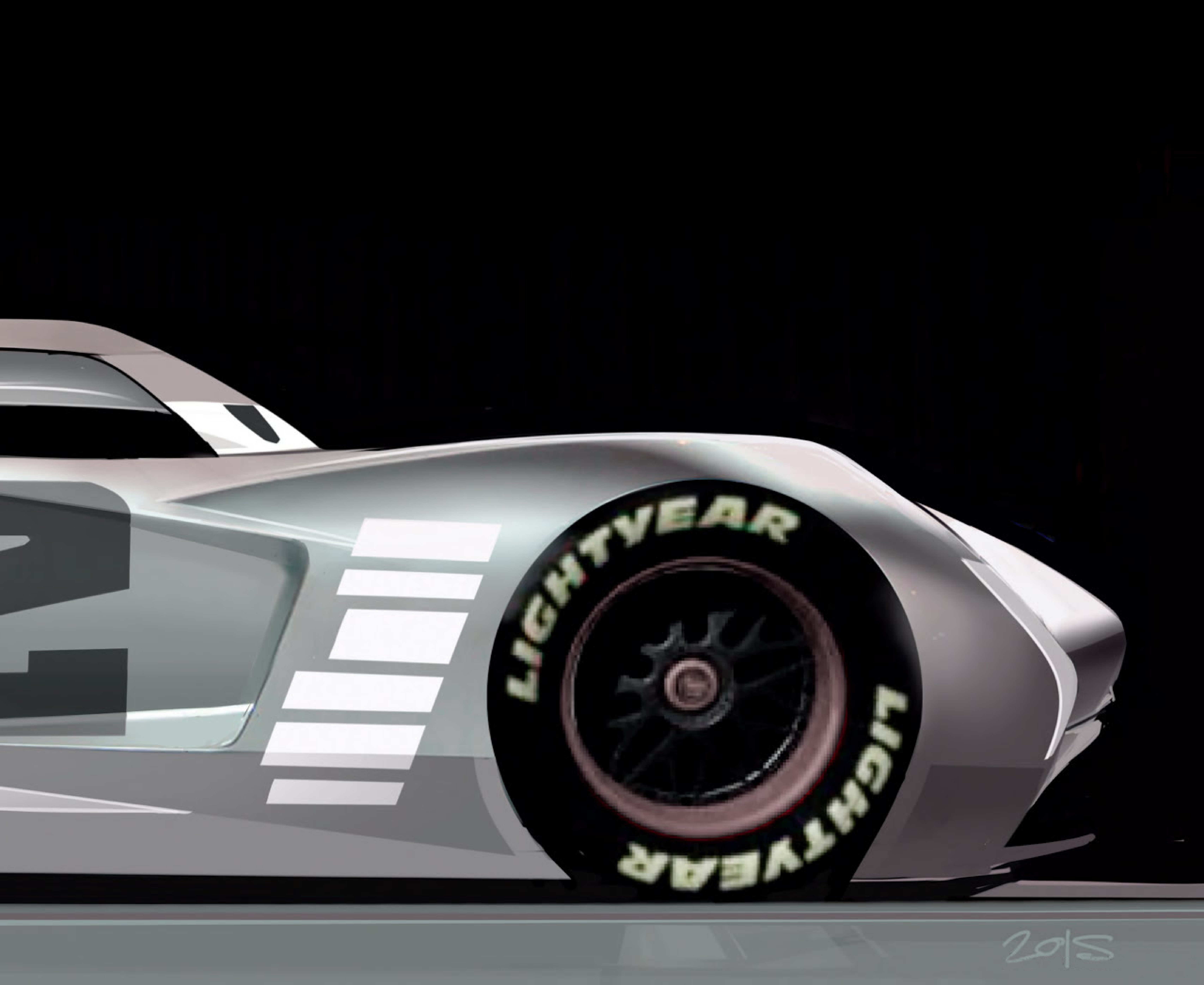



Painted black stripe graphic
is fast standing still-
LIGHTYEAR
LIGHTYEAR
LIGHTYEAR
LIGHTYEAR
Graphite and black

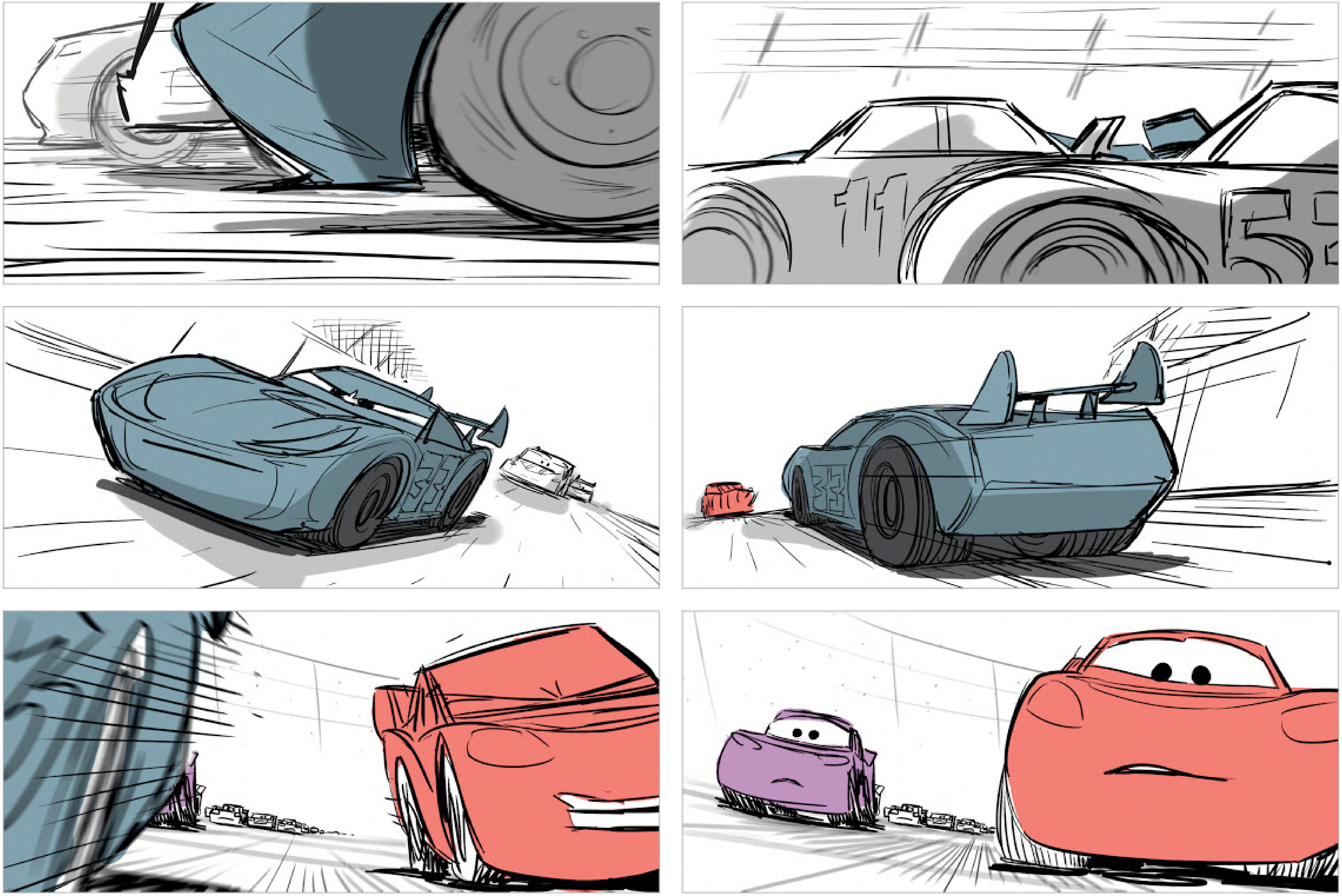

ROOF RUDDERS slight change
extend rudder back to vent terminus
- integrate into vent pattern
* either reduce # of vents or compress
WINDOW W/ WINDOW BOX

(above) Design by **JAY SHUSTER**, Model by **ANDREW SCHMIDT**; (left column) Design by **JAY SHUSTER**, Sculpt by **JEROME RANFT**; (opposite top left and right column) **JEROME RANFT** Clay; (opposite bottom left) **ANDREW SCHMIDT** Digital

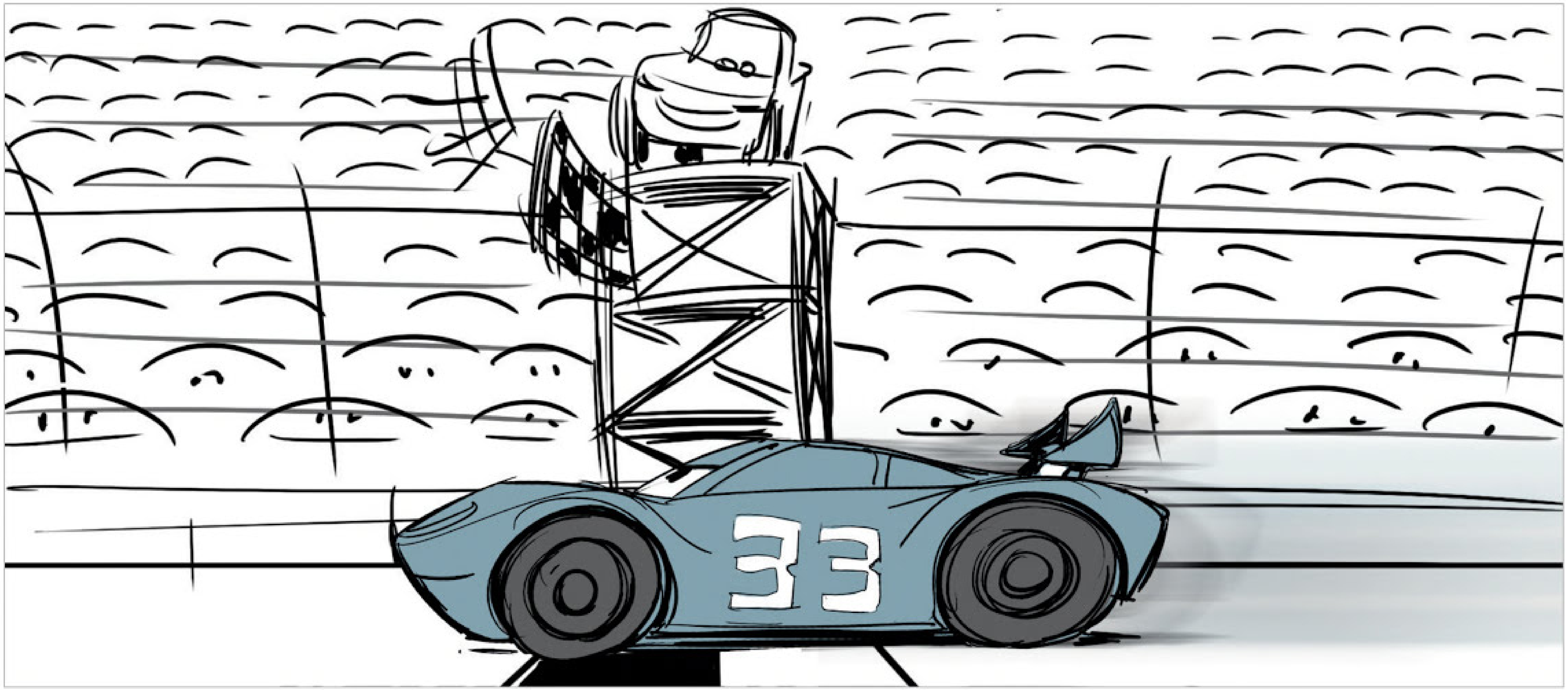

LIGHTYEAR
LIGHTYEAR
LIGHTYEAR
LIGHTYEAR
STORM 62/A

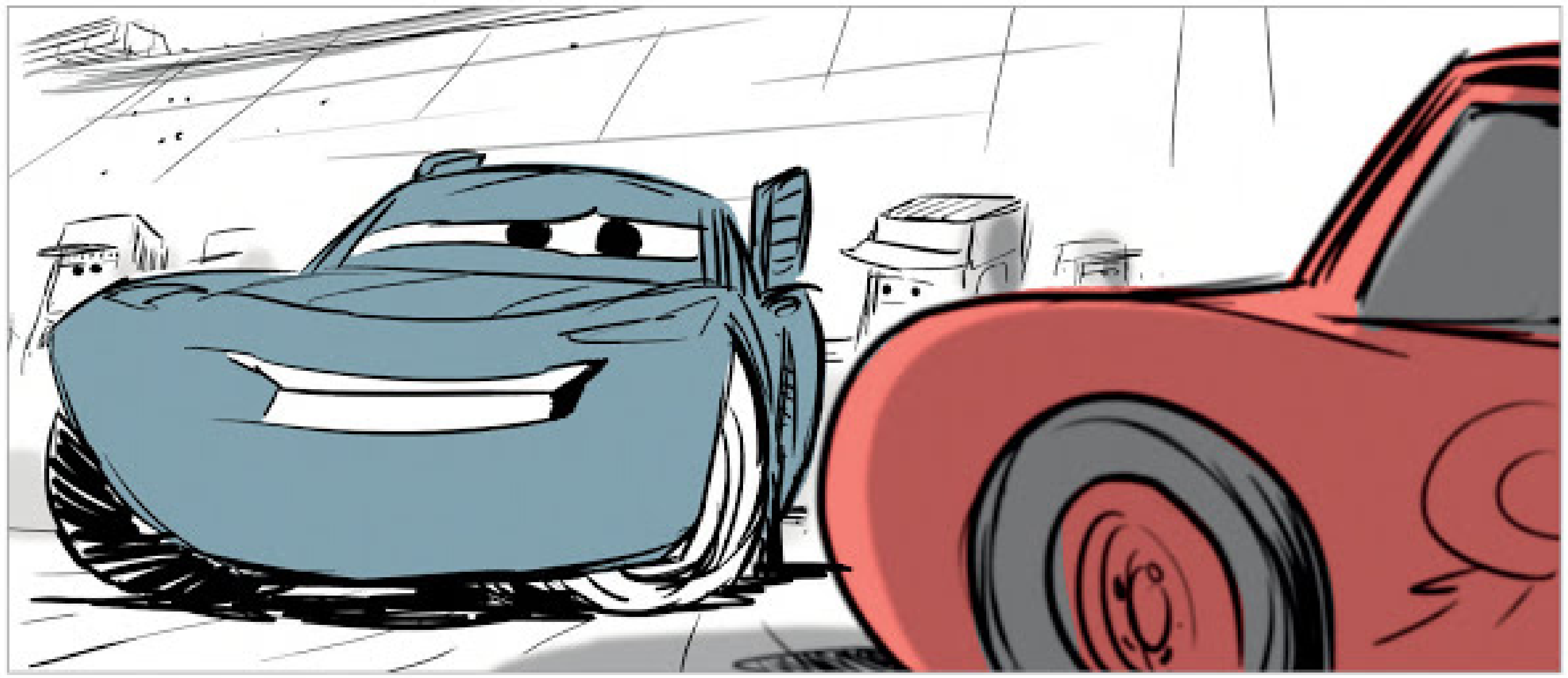

LIGHTYEAR
LIGHTYEAR

2015



JOHN HOFFMAN, SAM HOOD, AND SCOTT MORSE Storyboards; (opposite) **SAM HOOD AND SCOTT MORSE** Storyboards





STORM FRONT

The arrival of Storm and the Next-Gens signals a big change in McQueen's world. He has never had this many consecutive losses in his entire career, and Storm won't let him forget it. For the first time in his career McQueen is no longer the youngest and fastest guy on the track. He now has to deal with a new group of younger, faster racers, and Storm is the face of this new generation. Storm and the Next-Gen racers signal not only the end to McQueen's racing dominance, but also the end to his entire racing world.

—**JOHN HOFFMAN,** Story Artist

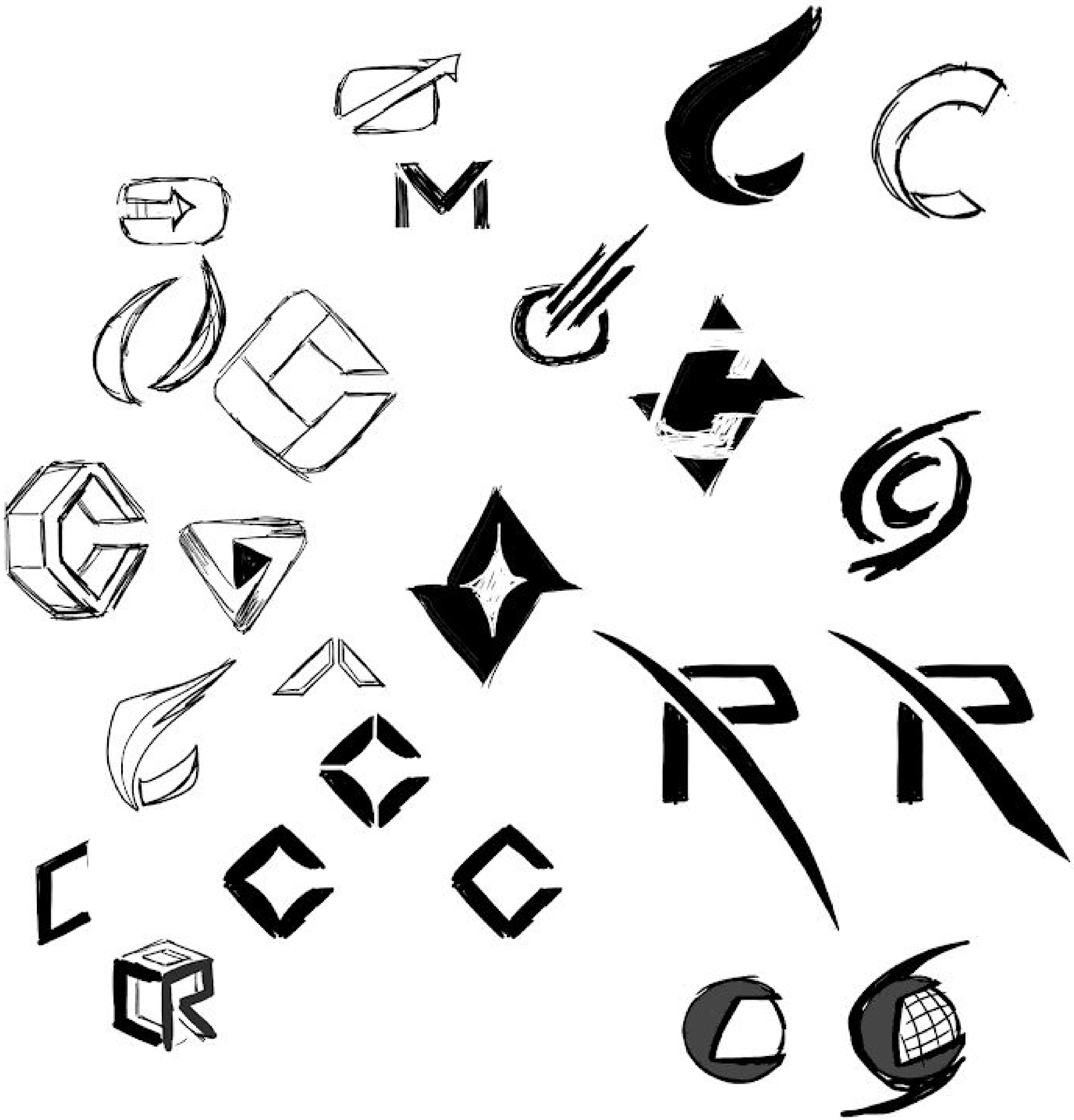
Jackson Storm, as the film's antagonist, is in many ways the opposite of Lightning McQueen. We wanted the graphics to emphasize the difference between these two characters, as this difference is a theme throughout the film. Where McQueen's bright red and warm yellow accents are a reflection of his personality, the dark grey and cool blue accents on Storm reflect the darker disposition of his character.

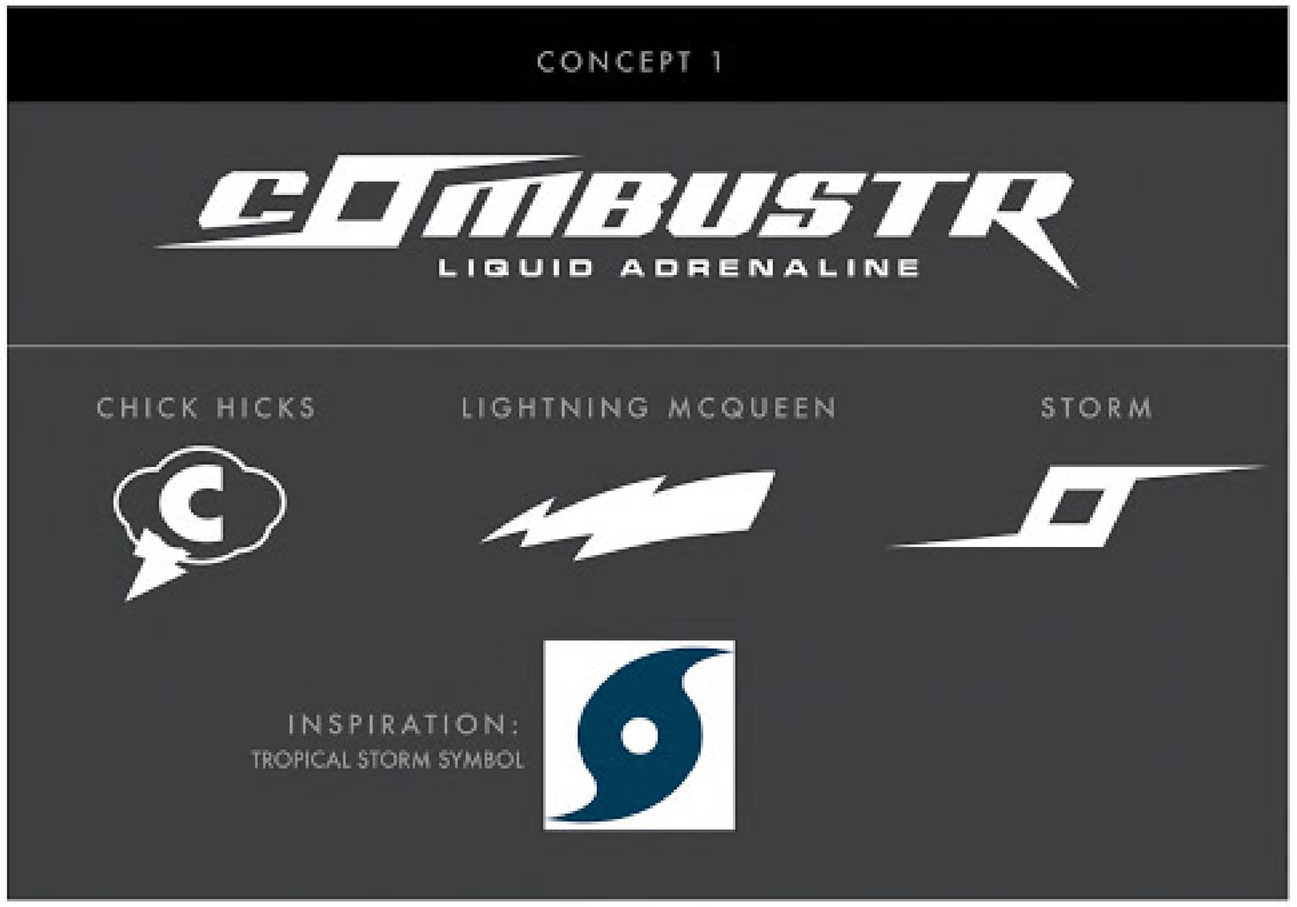
The first step in the graphic design process was to generate logo ideas for Combustr: Liquid Adrenaline, our fictional sponsor (which later became IGNTR.) The concept of combustion led us to think of explosions, and we experimented with exploding words and letters. As we started to simplify the design, it morphed into the shape of a throwing star, which, when further simplified, started to look like the tropical storm symbol used in weather forecasting.

This storm symbol was perfect in many ways. It represented our character's name and also happened to double as Storm's initial. We developed the shape to share the sharp angles found in his character design. This too stands in juxtaposition to the round curves of McQueen and amplifies the difference between the two characters.

The "S" symbol is to Storm what the lightning bolt is to McQueen: an icon that is instantly recognizable, and an insight into the character's true persona.

—**JOSH HOLTSCLAW,** Graphic Artist





CONCEPT 1

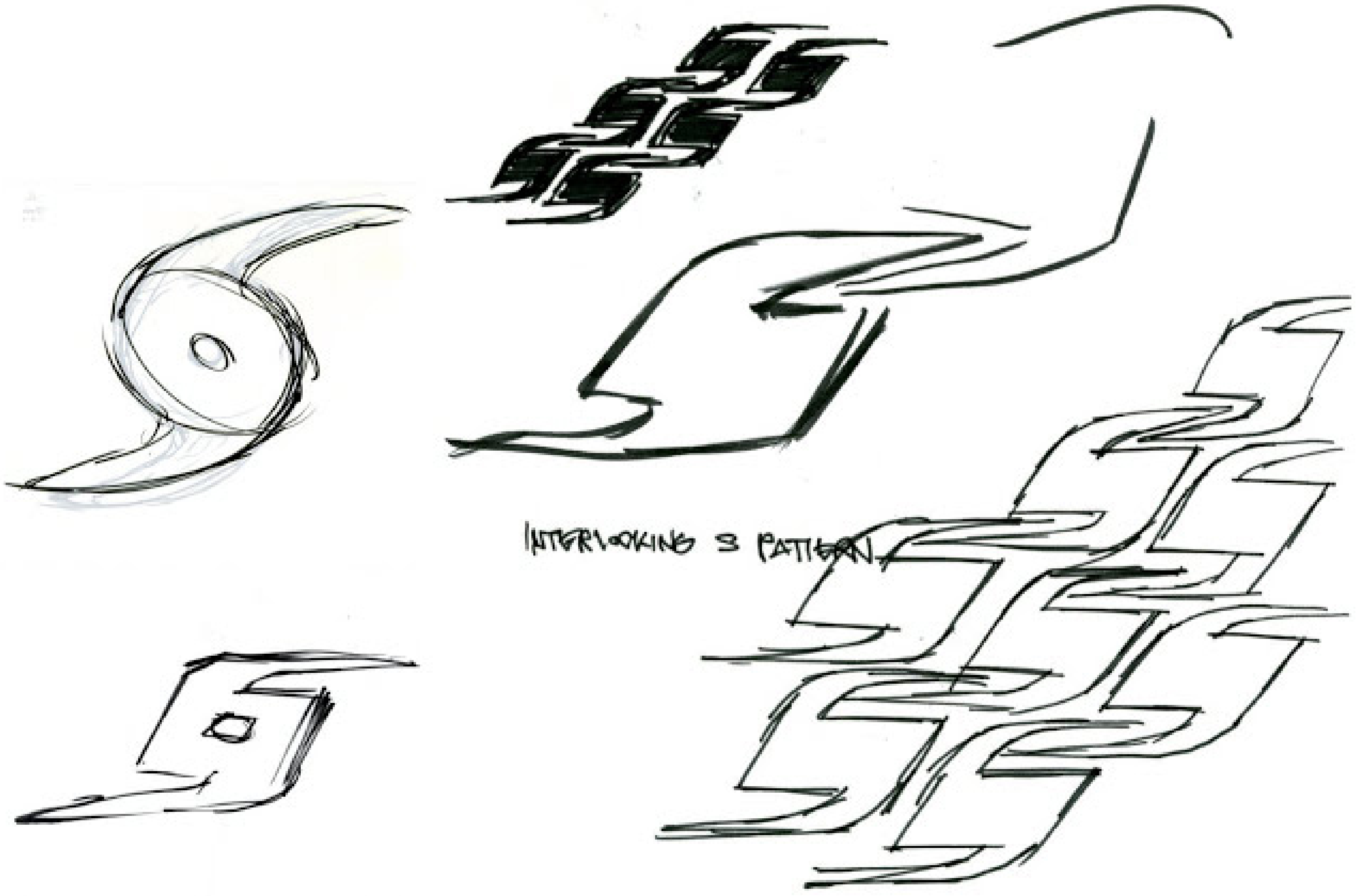
COMBUSTR
LIQUID ADRENALINE

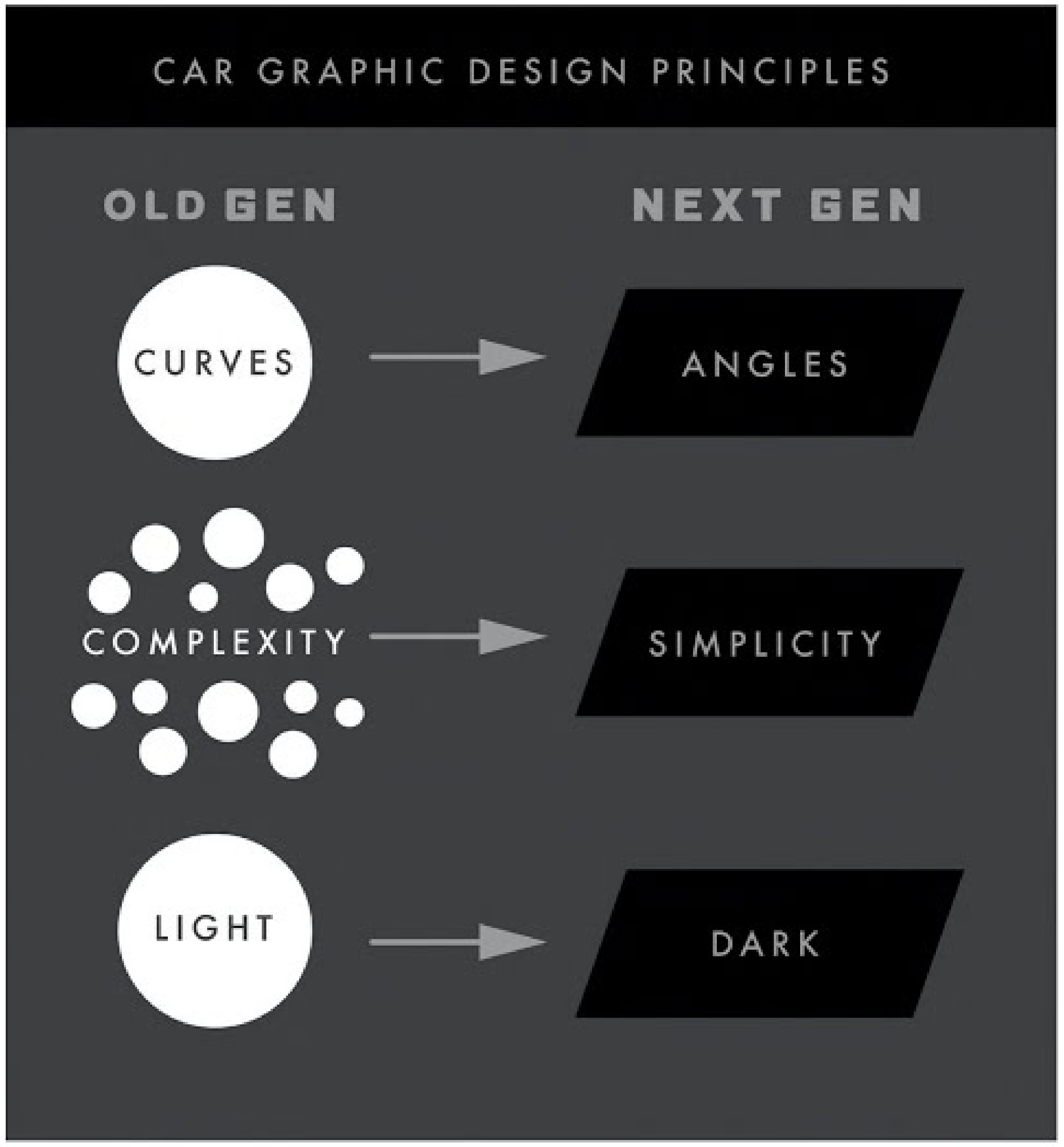
CHICK HICKS

LIGHTNING MCQUEEN

STORM

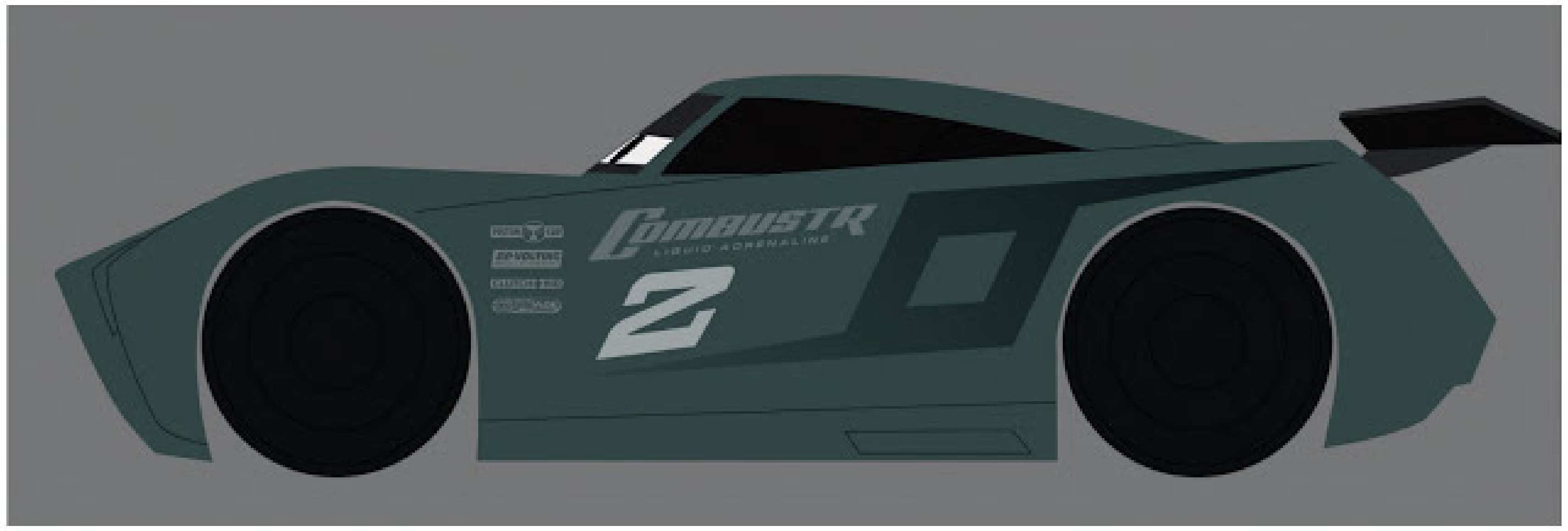
INSPIRATION:
TROPICAL STORM SYMBOL

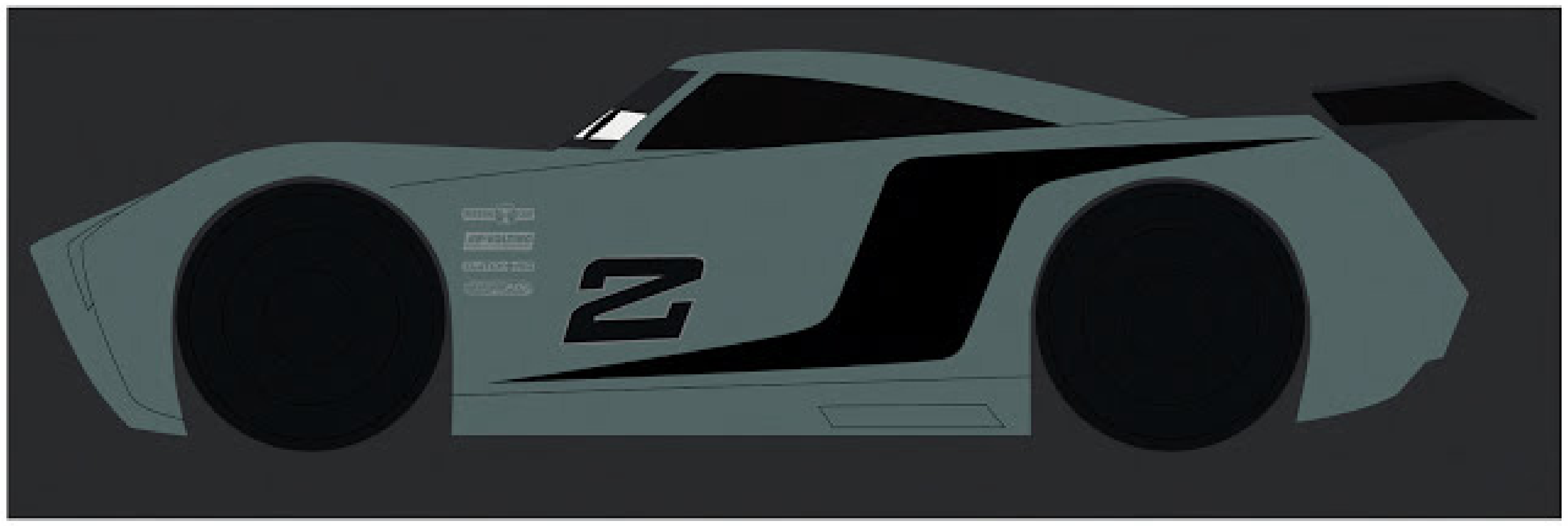

INTERLOCKING S PATTERN



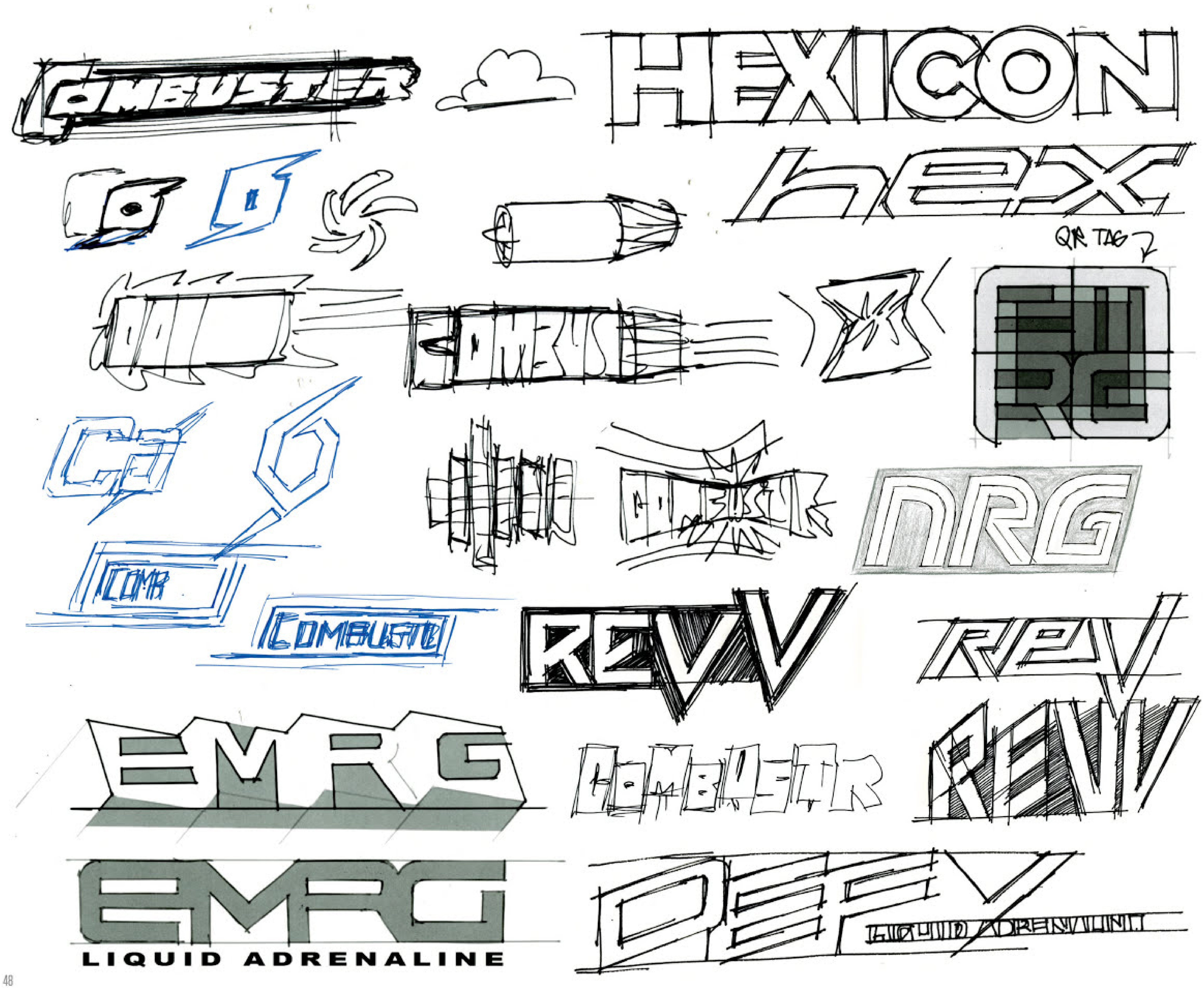
CAR GRAPHIC DESIGN PRINCIPLES

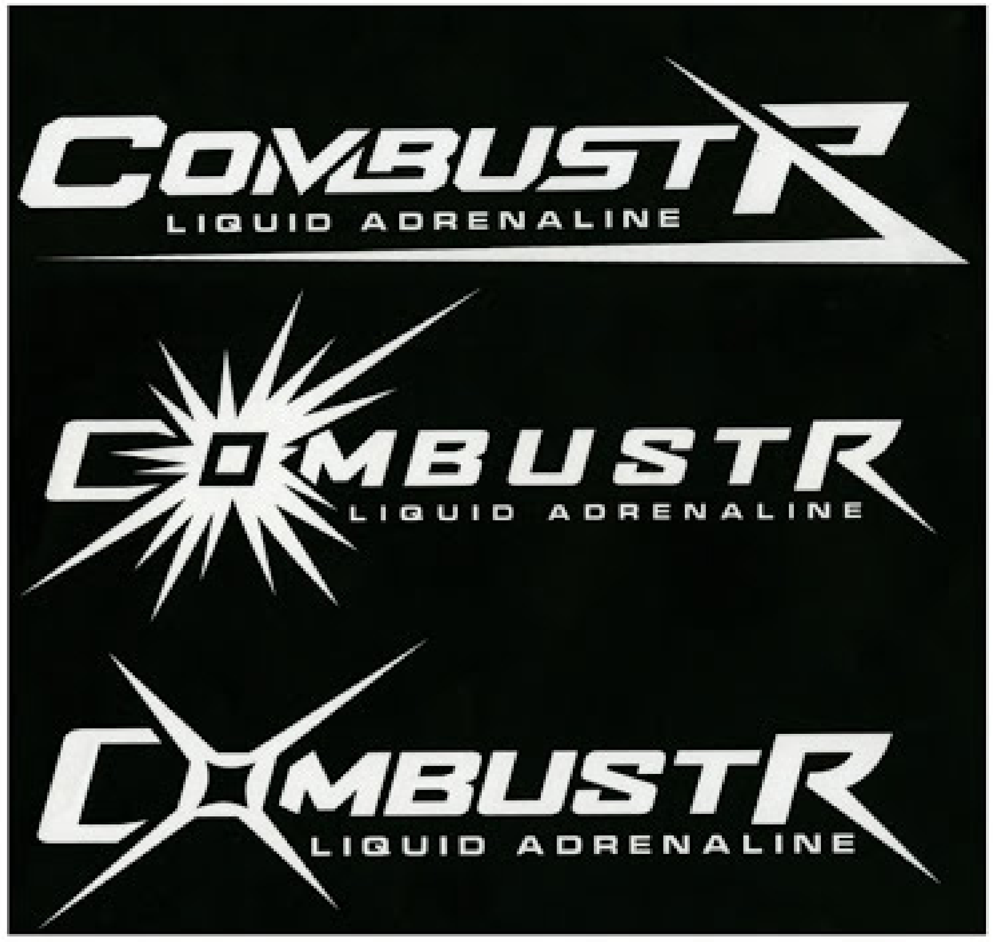
OLD GEN	NEXT GEN
CURVES	ANGLES
COMPLEXITY	SIMPLICITY
LIGHT	DARK

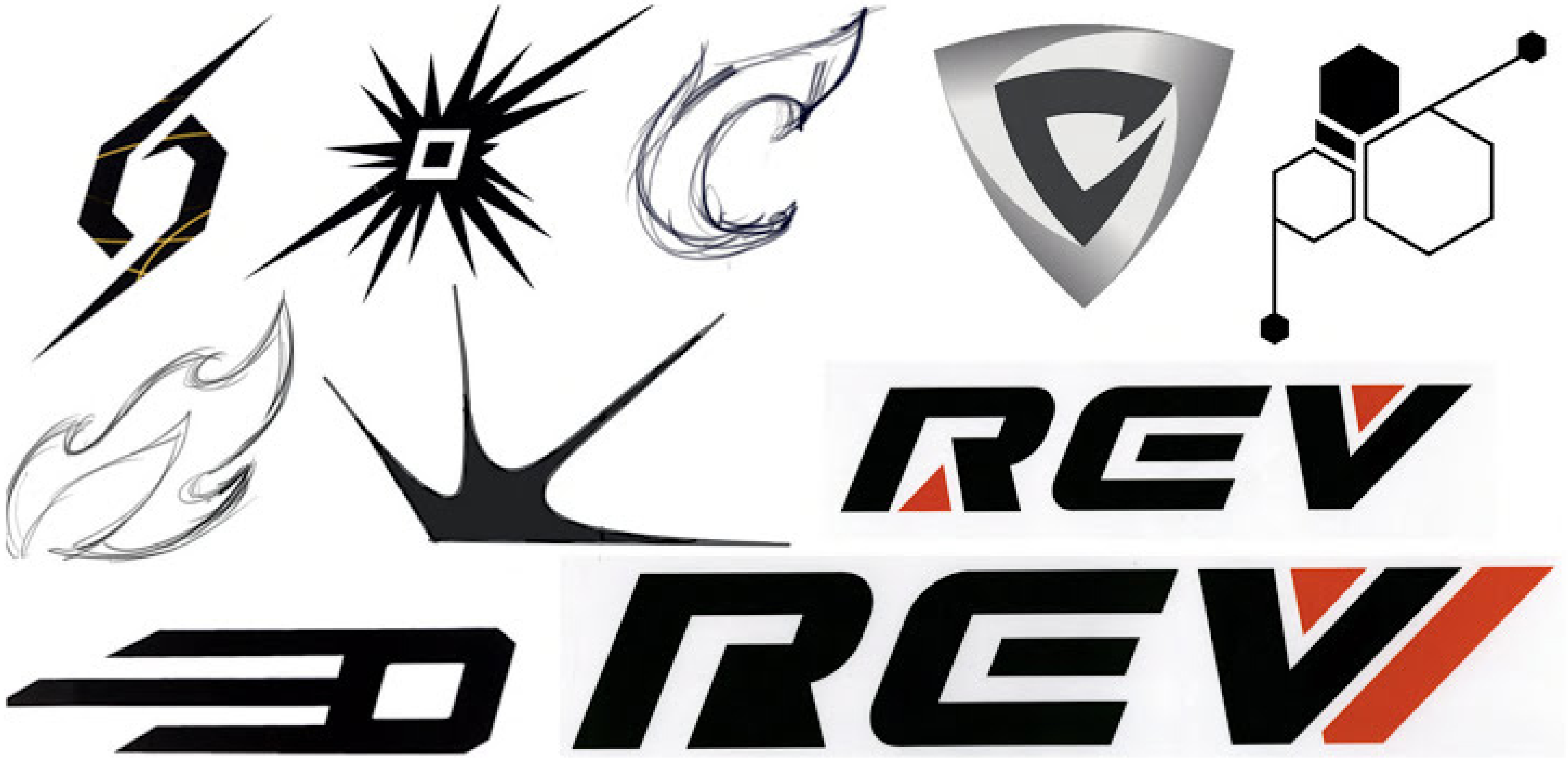

COMBUSTR
LIQUID ADRENALINE
2

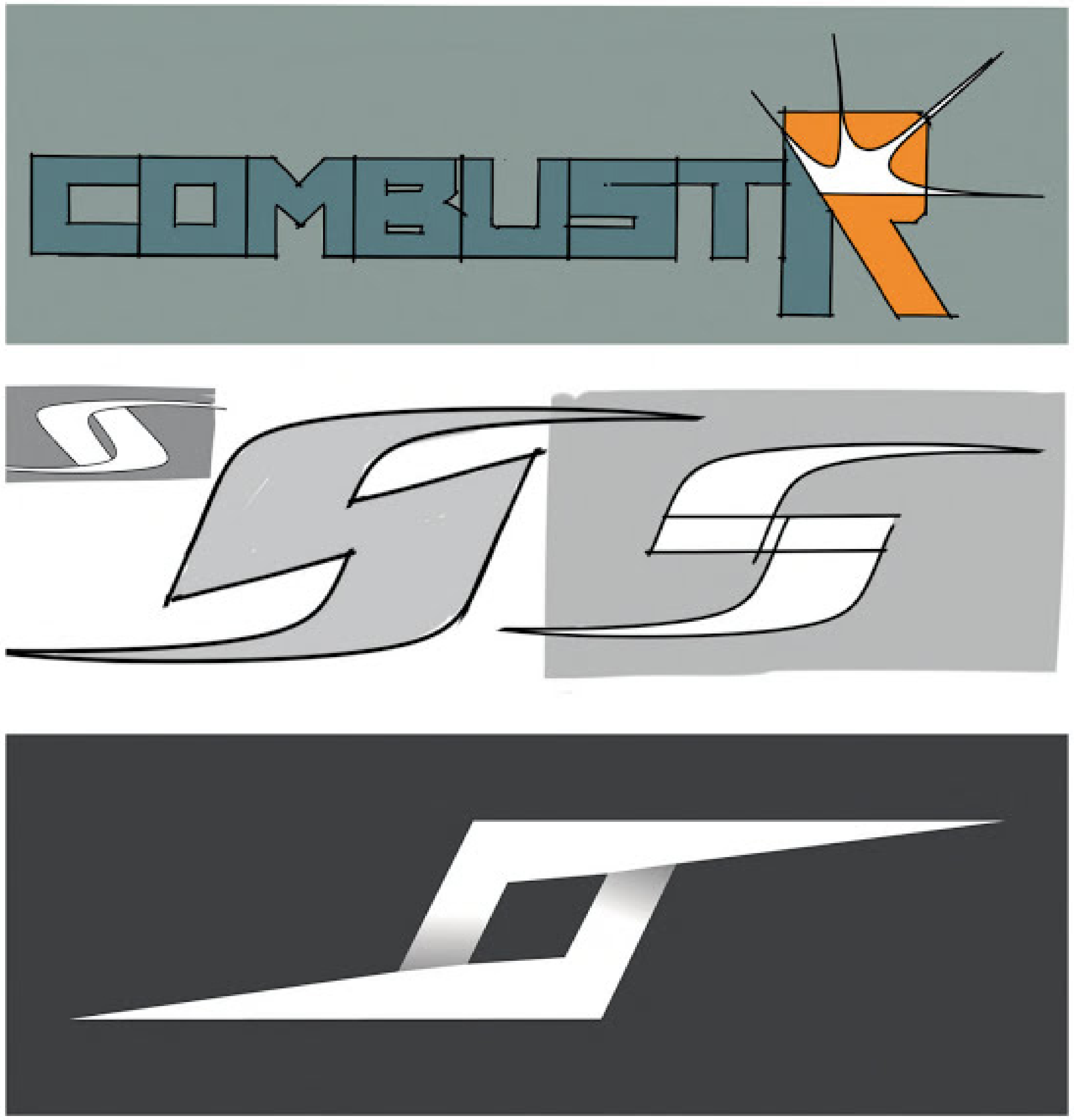


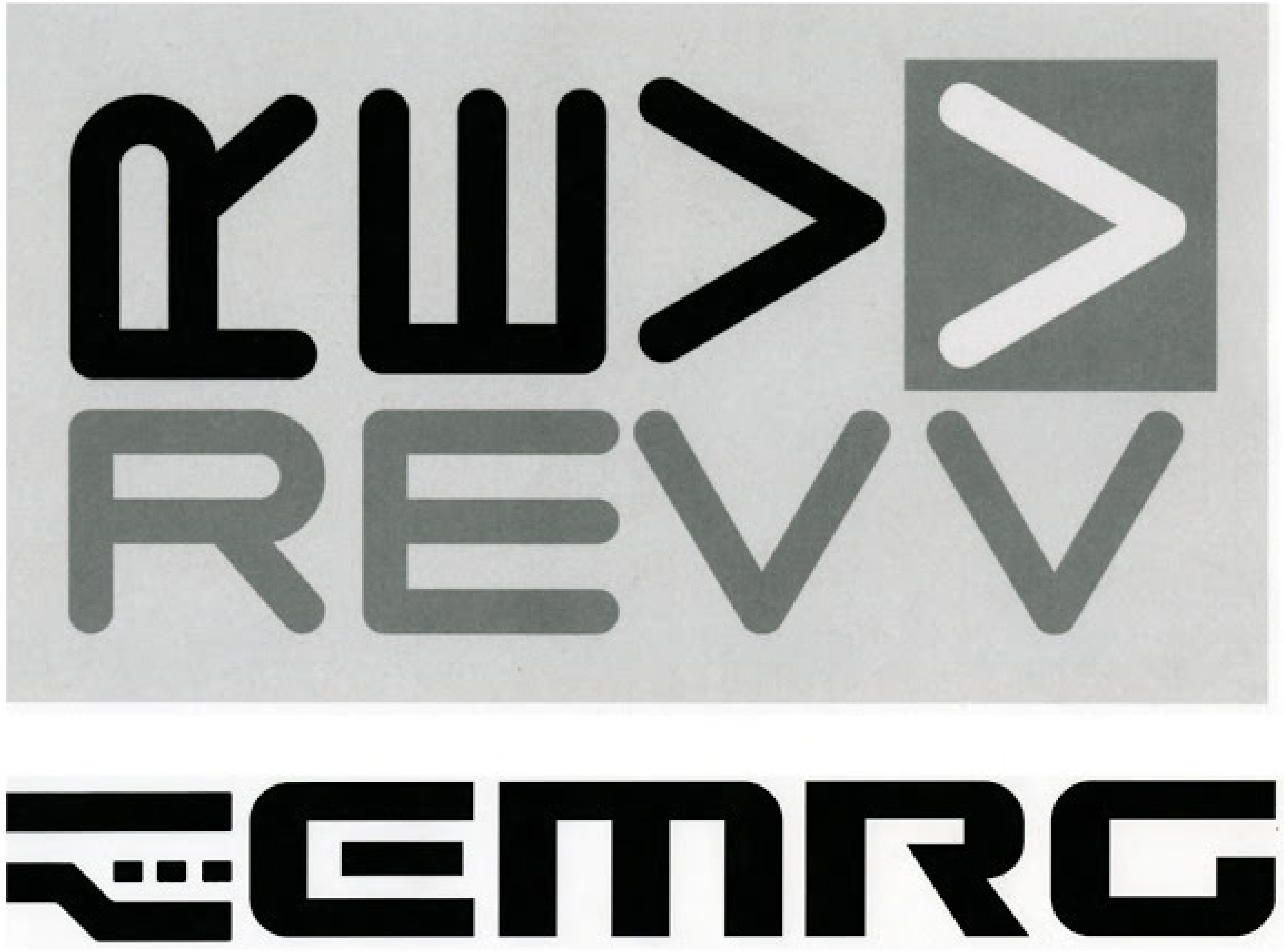
(top left) **JOSH HOLTSCLAW** Digital; (top right) **JAY SHUSTER** Marker; (bottom left) **JOSH HOLTSCLAW** Digital; (bottom right) **JOSH HOLTSCLAW** Digital; (opposite) **JOSH HOLTSCLAW** Marker


COMBUSTER
HEXICON
hex
QR TAG?
NRG
NRG
COMB
COMBUSTR
REVV
REV
EMRG
COMBUSTR
REVV
EMRG
LIQUID ADRENALINE
DEFY
LIQUID ADRENALINE

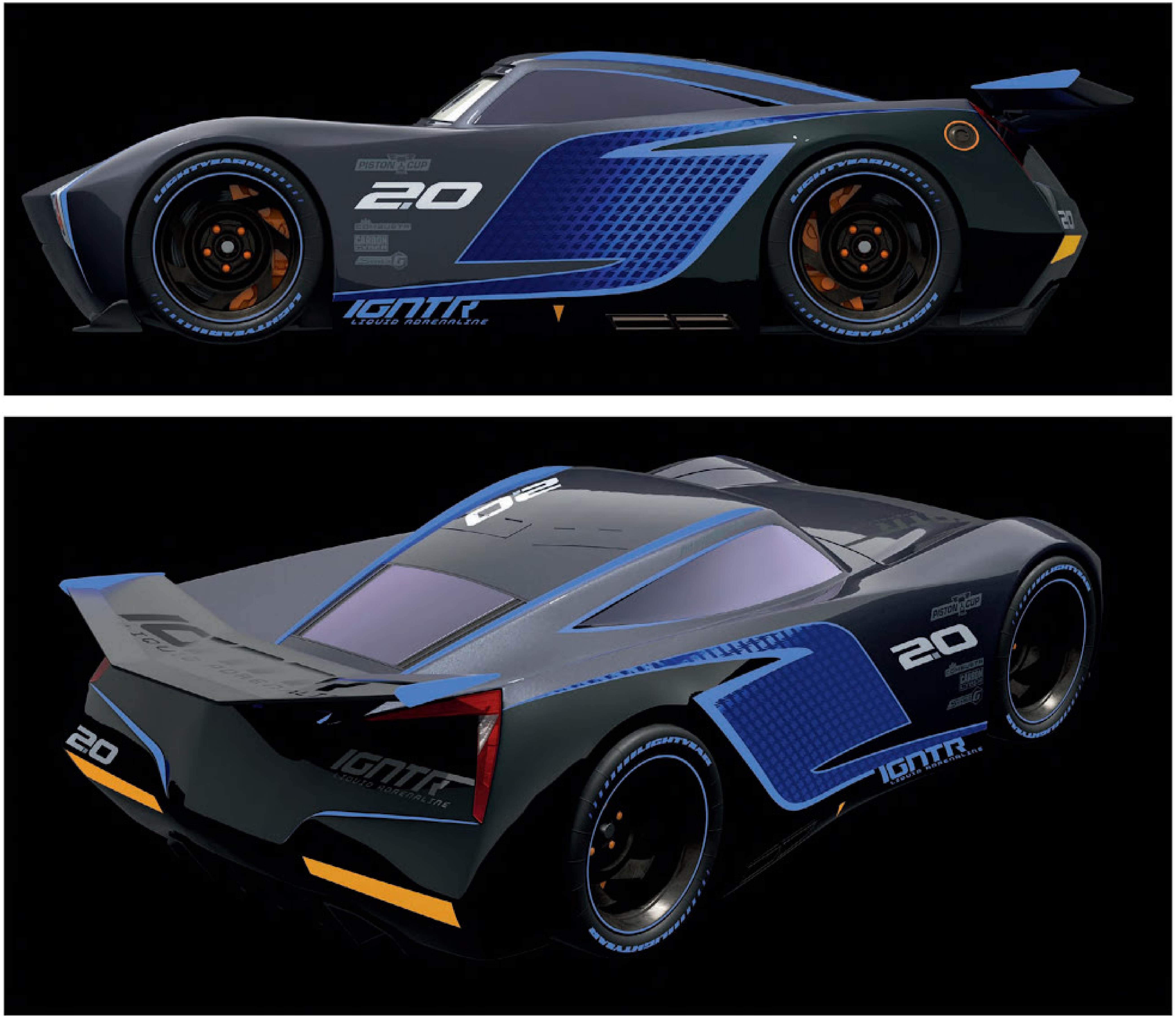

COMBUSTR
LIQUID ADRENALINE
COMBUSTR
LIQUID ADRENALINE
COMBUSTR
LIQUID ADRENALINE





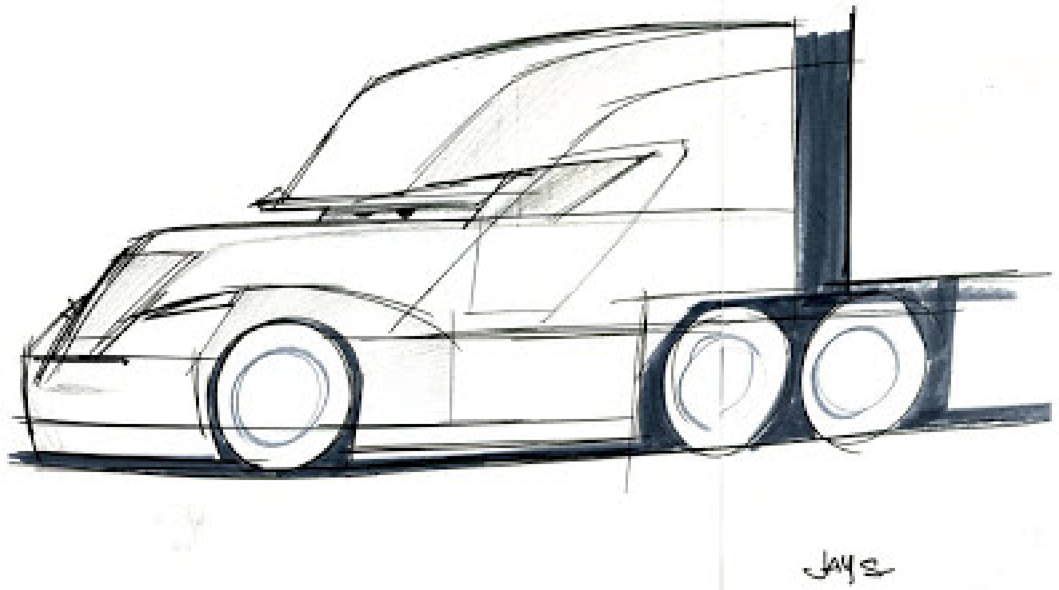

REV
REVV
EMRG

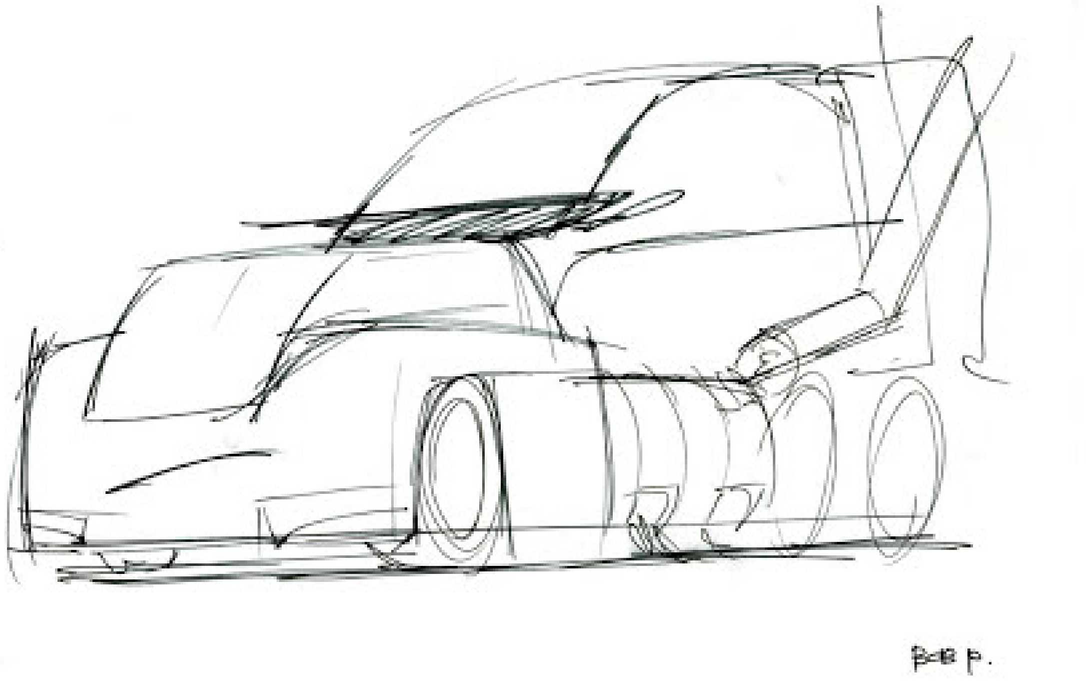
JAY SHUSTER, JOSH HOLTSCLAW, CRAIG FOSTER, BOB PAULEY Pen, pencil, digital

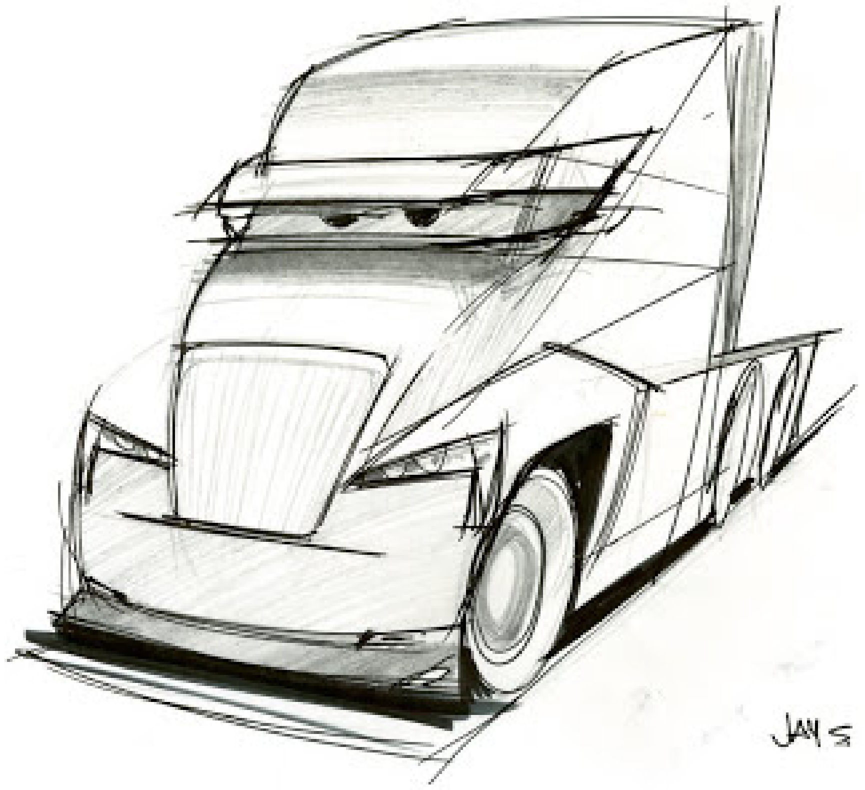

PISTON CUP
2.0
CARBON
IGNTR
LIQUID ADRENALINE
LIGHTYEAR
20

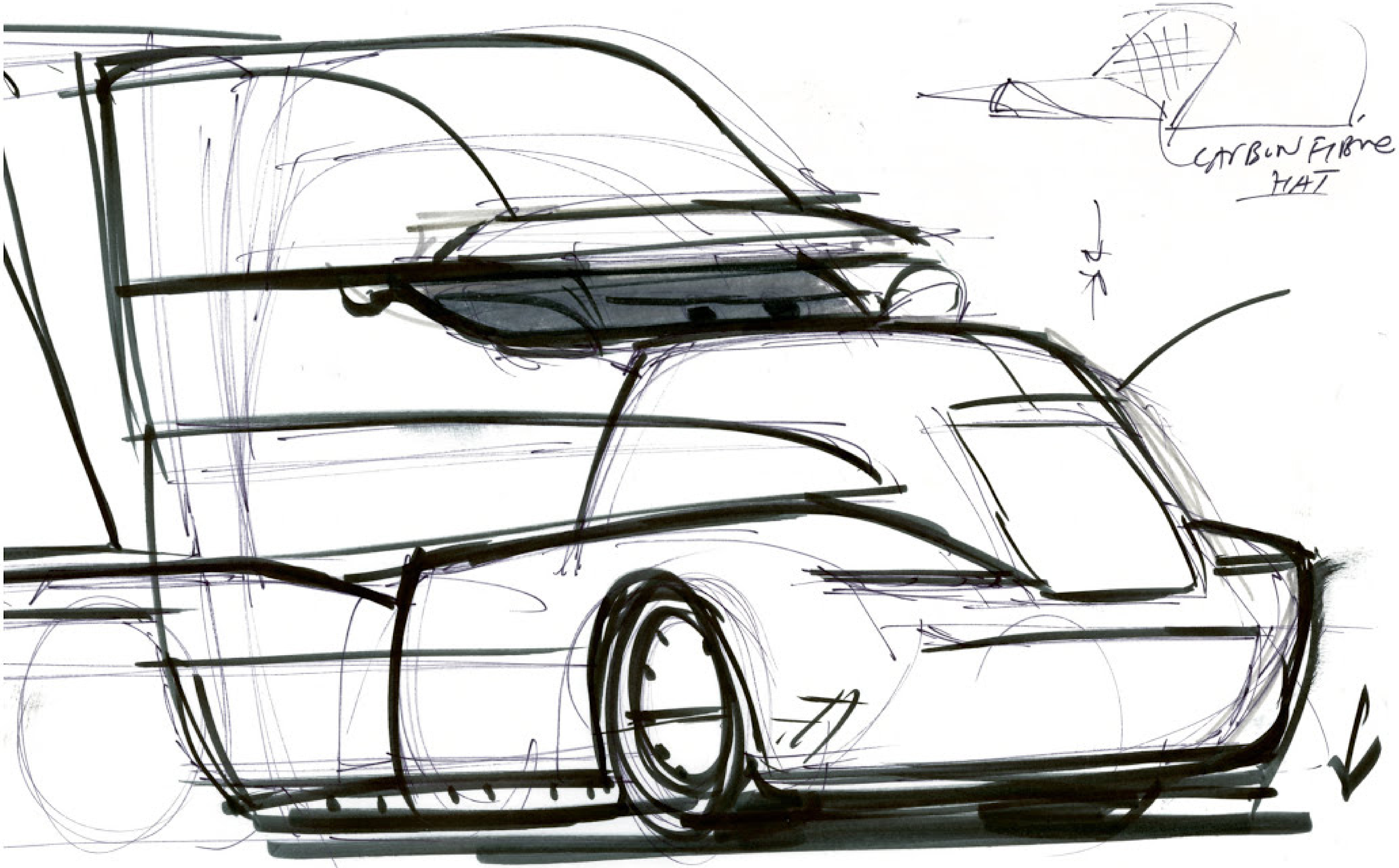
Shading by **LAURA PHILLIPS AND GEORGE NGUYEN,** Graphics by **JOSH HOLTSCLAW,** Model by **JAY SHUSTER AND ANDREW SCHMIDT,** Digital

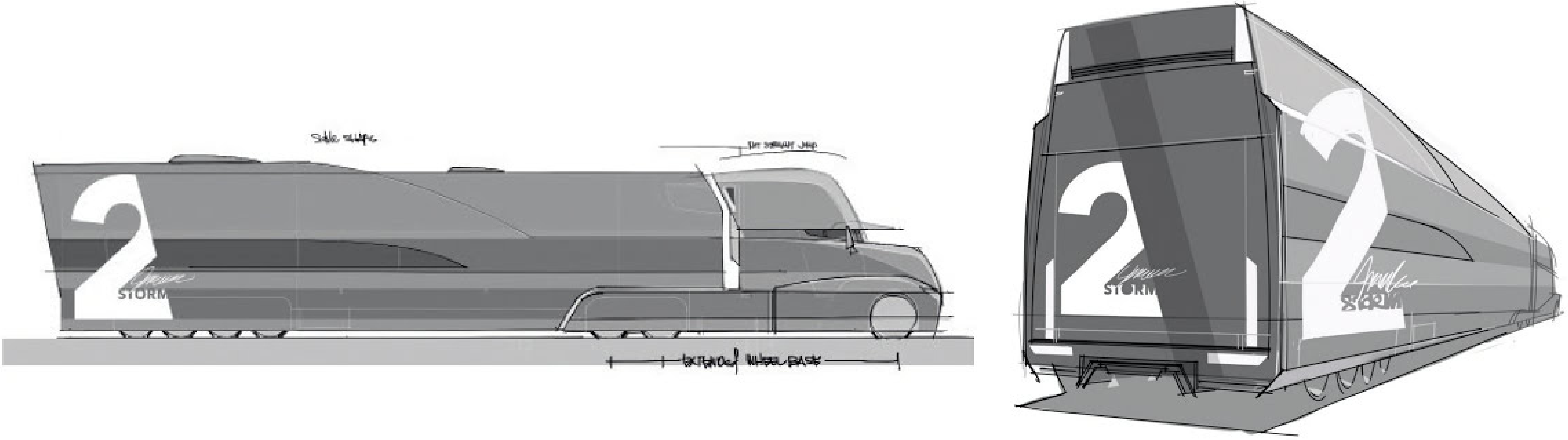
2.0
PISTON CUP
2.0
IGNTR
LIQUID ADRENALINE

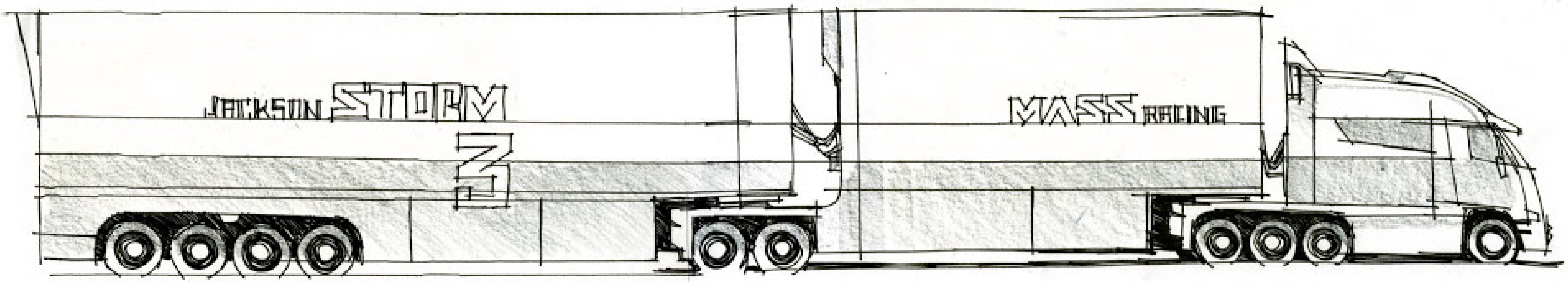

JAY S

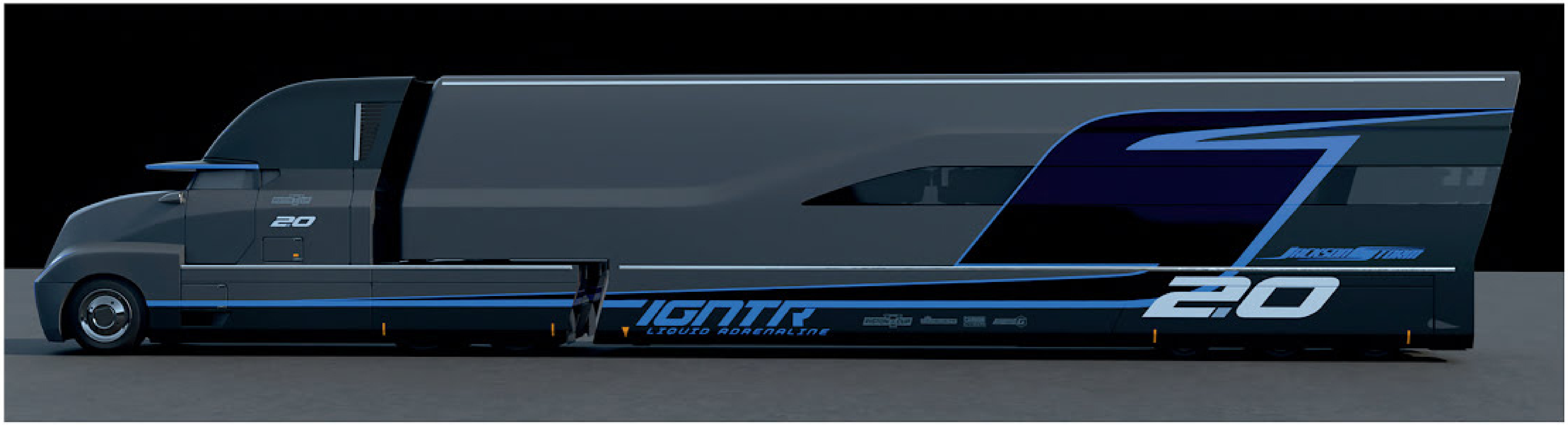

BOB P.


JAY S


CARBON FIBRE
HAT


side shape
2
STORM
extended wheel base
2
STORM
2
STORM


JACKSON STORM
2
MASS RACING


2.0
IGNTR
LIQUID ADRENALINE
JACKSON STORM
2.0

(top row) **JAY SHUSTER** Digital; (middle) **JAY SHUSTER** Marker and pencil; (bottom) Design by **JAY SHUSTER**, Model by **IAN STEPLOWSKI**, Graphics by **JOSH HOLTSCLAW**, Shading by **LAURA PHILLIPS**; (opposite top from left to right) **JAY SHUSTER** Marker, **BOB PAULEY** Marker, **JAY SHUSTER** Marker; (opposite bottom) **BOB PAULEY** Marker

Trunk Fresh
34
LIGHTYEAR

TOW CAP
4
LIGHTYEAR

84
LIGHTYEAR

RPM
64
LIGHTYEAR

SynerG
5
LIGHTYEAR

RE-VOLTING
REBUILT ALTERNATORS
48
LIGHTYEAR

No Stall
123
LIGHTYEAR

Triple Dent
21
LIGHTYEAR

NITROADE
HI-ENERGY DRINK
28
LIGHTYEAR

GASPRIN
70
LIGHTYEAR

Gask-its
80
LIGHTYEAR

00
LIGHTYEAR

COMBUSTR
THE POWER OF ONLINE BANKING
11
LIGHTYEAR

CARBON CYBER
67
LIGHTYEAR

MOOD SPRINGS
33
LIGHTYEAR

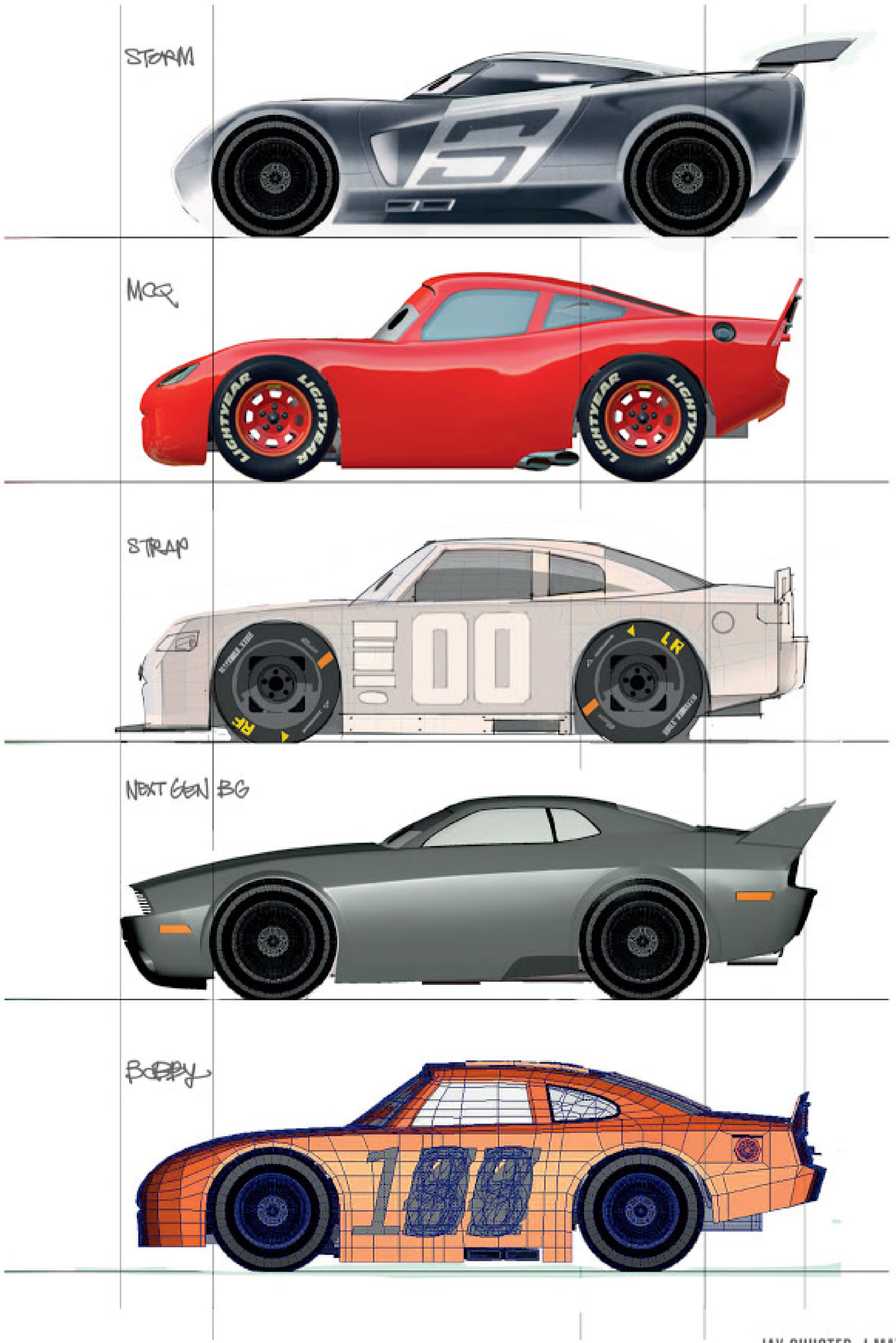
Blinkr
31
LIGHTYEAR

EASY IDLE
51
LIGHTYEAR

FAUX WHEEL DRIVE
54
LIGHTYEAR

Design by **JAY SHUSTER**, Model by **SAL MELLUSO**, Graphics by **CRAIG FOSTER, JOSH HOLTSCLAW, CATHERINE KELLY, PAUL CONRAD, GARRETT TAYLOR**

CARS 3 RACERS



JAY SHUSTER, J MAYS Digital

We really wanted to reinforce that 10 years have passed since we last saw our original racers. Brands, logos, and paint jobs have caught up to McQueen, and he is no longer the flashy young rookie. So we tried to make them live in the same world, McQueen fitting into a field of peers.

To create the juxtaposition between McQueen and the Next-Gen Racers, we played against Lightning's bright, flashy paint job making them more subdued while adding a lot of detail to the application of their paint. Subtle patterns and textures as opposed to garish sponsors of the old gens. With this approach, we hoped to convey a sense that the race world has moved beyond Lightning McQueen.

—**CRAIG FOSTER,** Graphics Art Director

34
TRUNK FRESH

TOWCAP
4

84

RPM
54

SYNERG
5

REVOLTING
48

NO STALL
123

TRIPLE DENT
2

NITROADE
28

GASPRIN
70

Gask-its
80

00

COMBUSTR
11

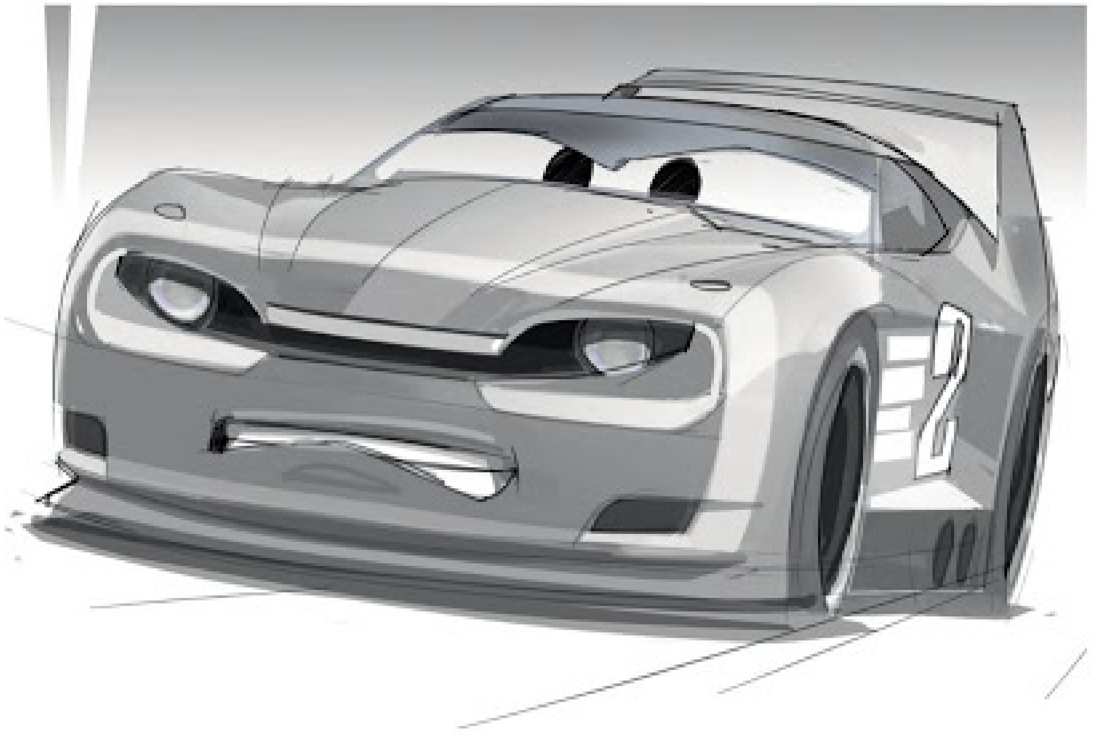
CARBON CYBER
67

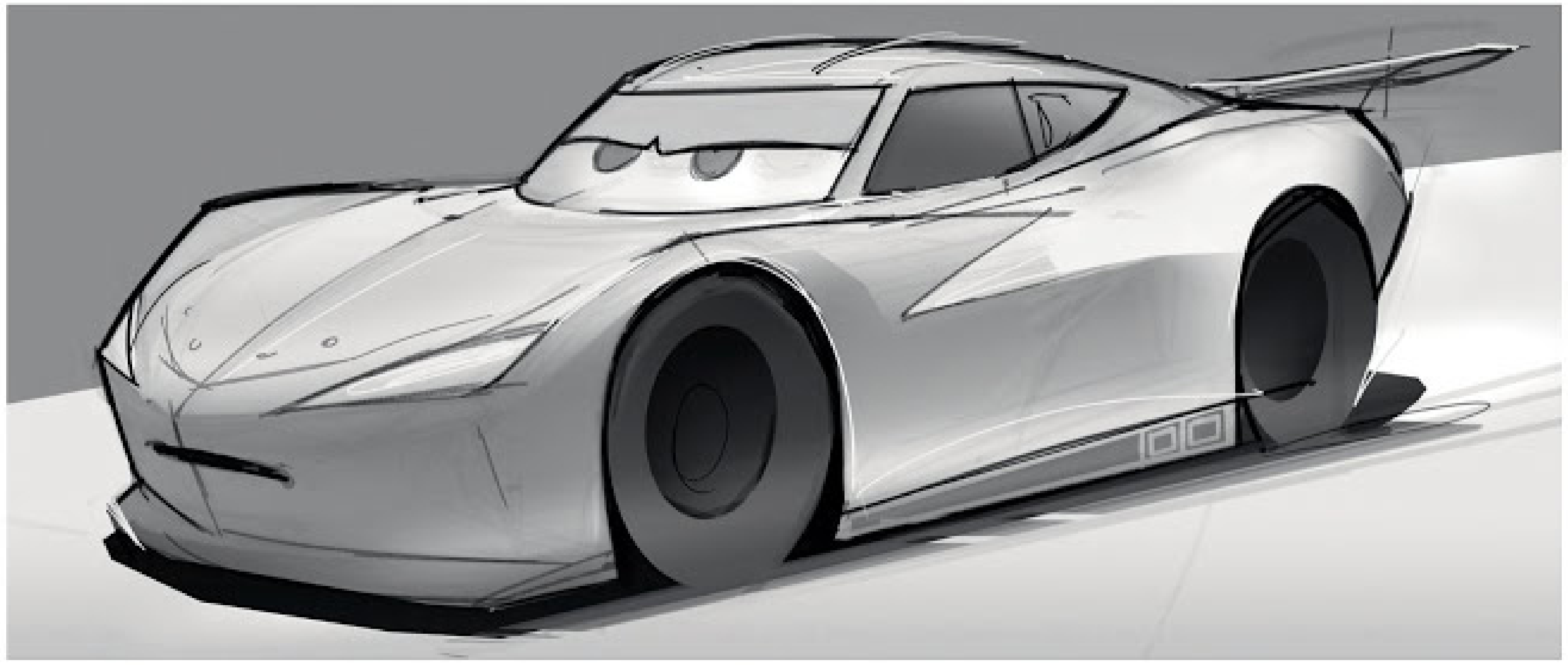
33

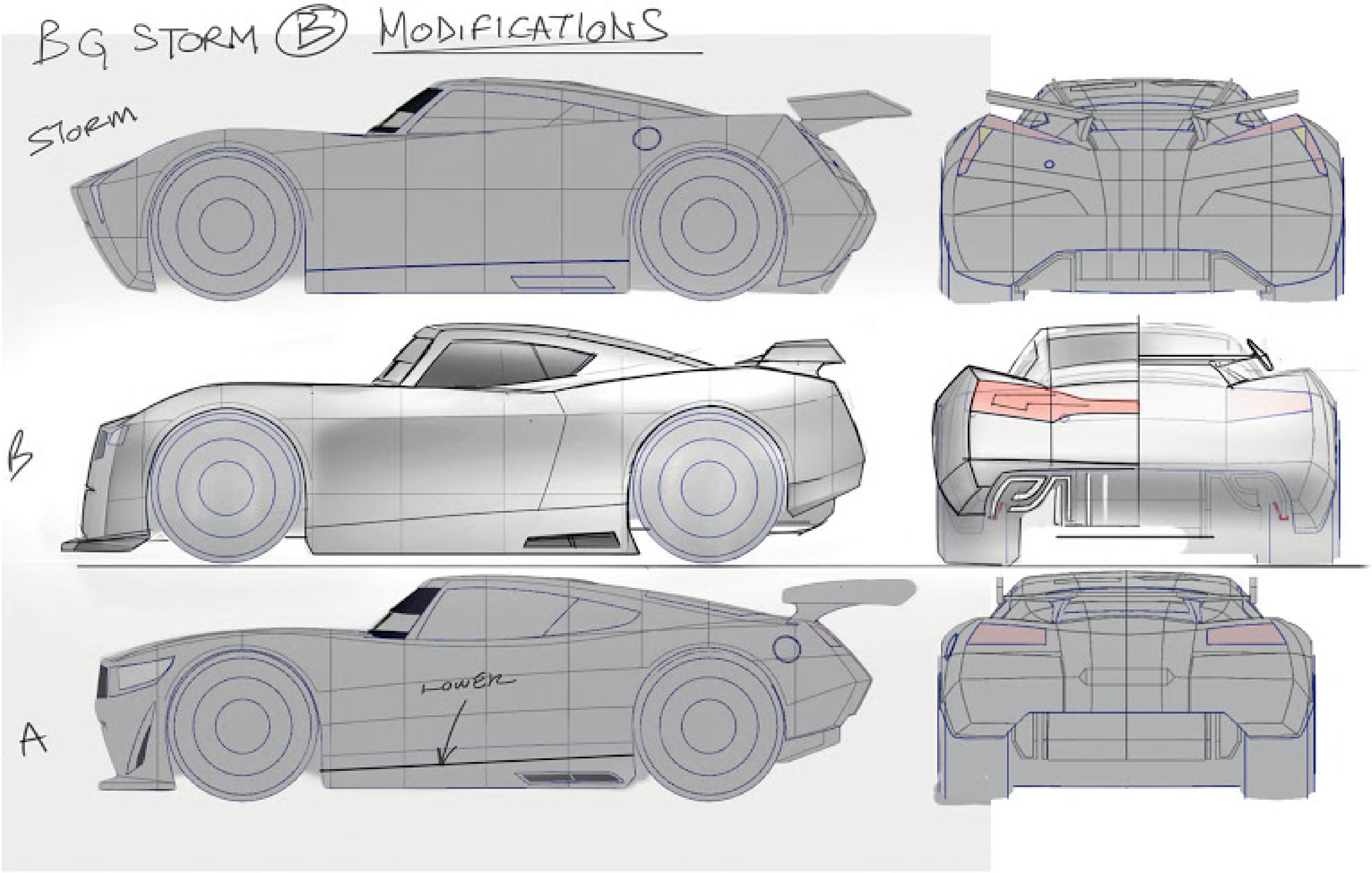
Blinkr
21

EASY IDLE
15

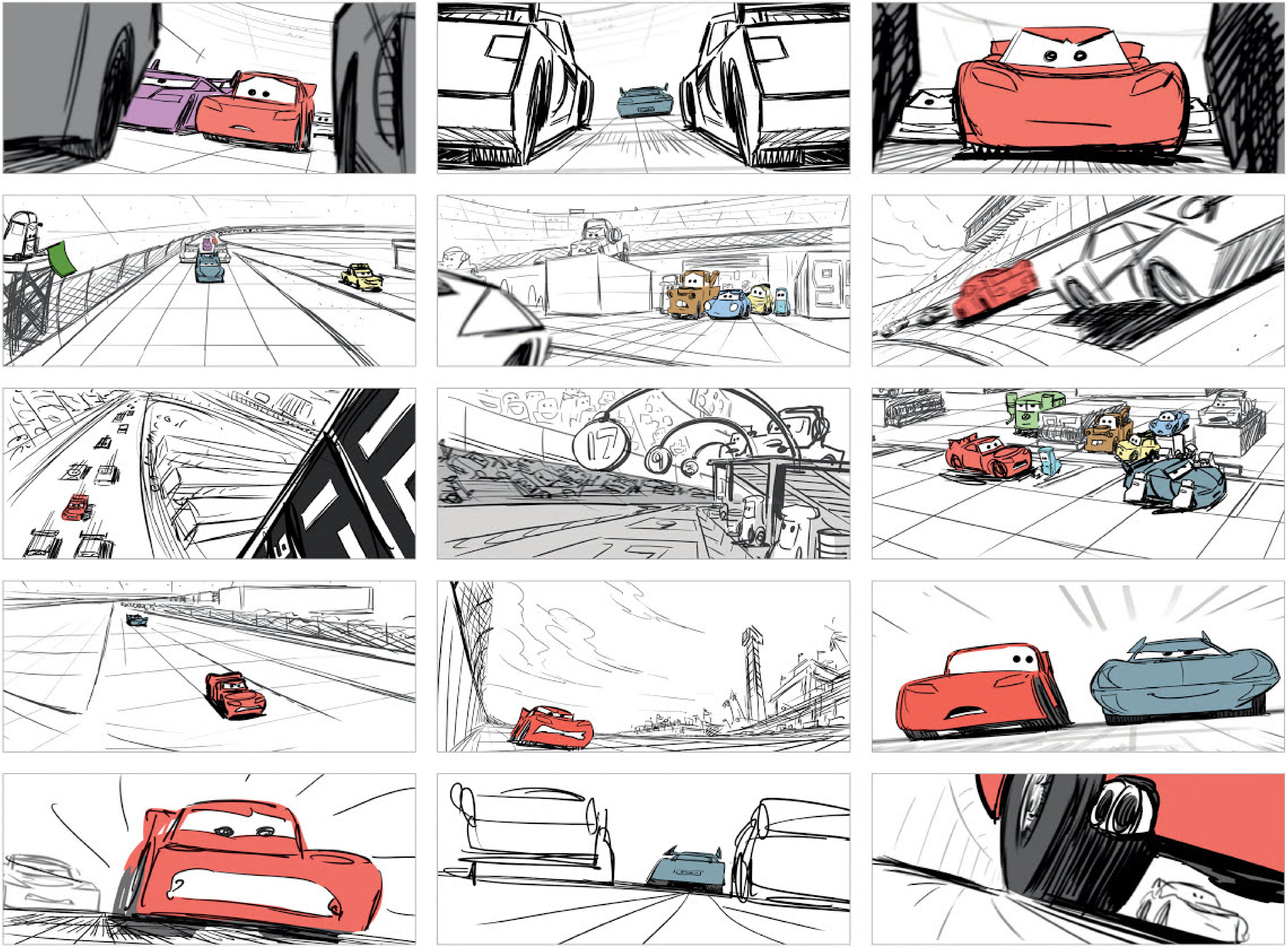
54



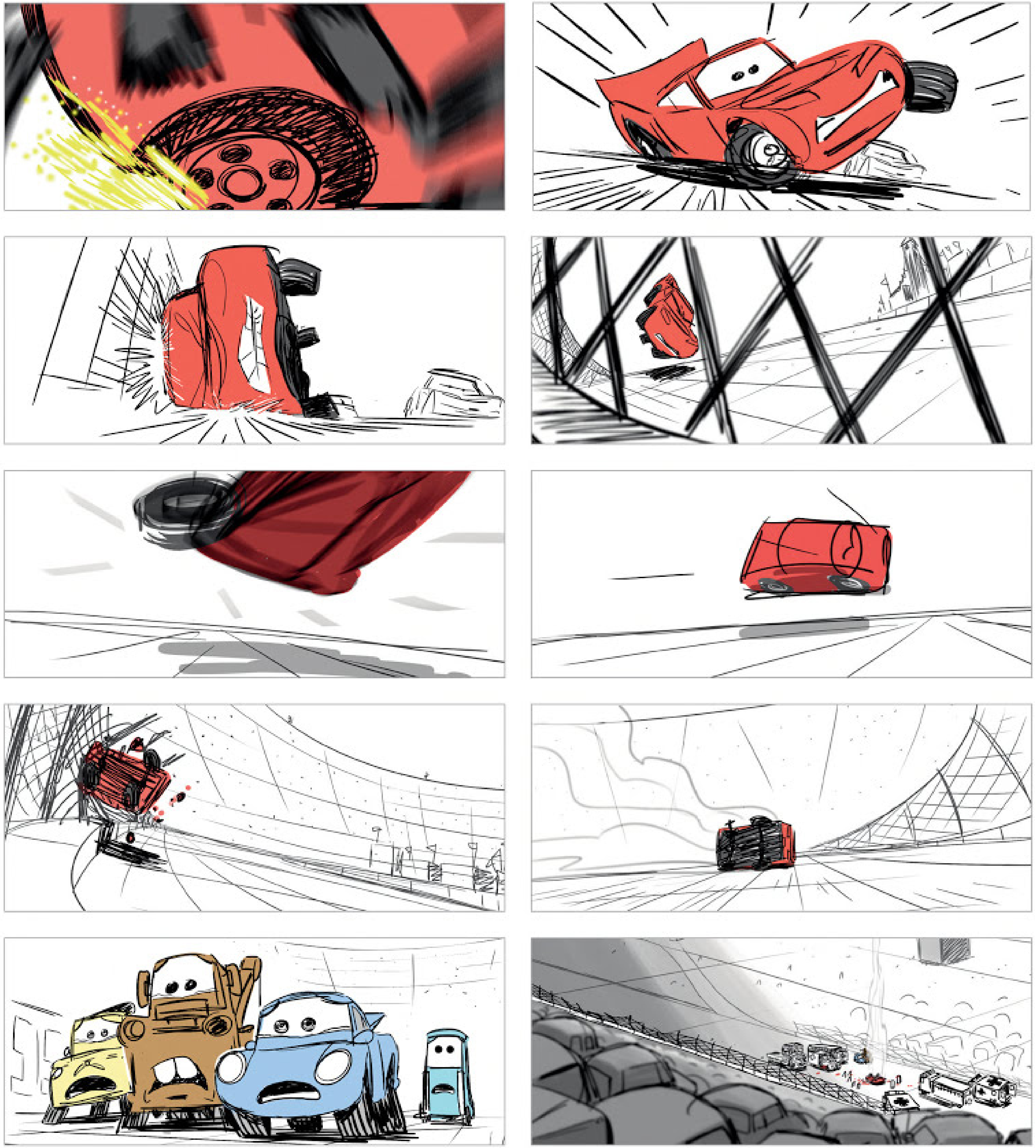


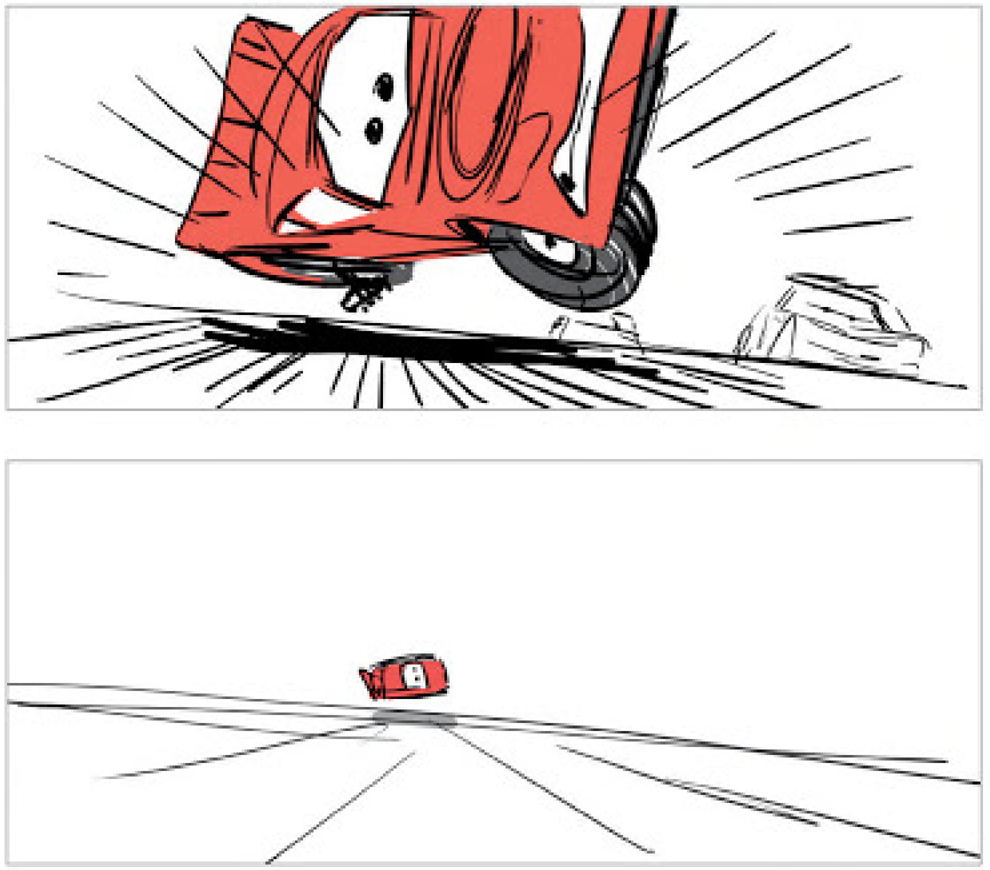

BG STORM (B) MODIFICATIONS
STORM
B
LOWER
A

(top left) **JAY SHUSTER** Digital; (top right) **GARRETT TAYLOR** Digital; (bottom) **JAY SHUSTER AND GARRETT TAYLOR** Digital



JOHN HOFFMAN, BRIAN FEE, SCOTT MORSE Storyboards; (opposite) **JOHN HOFFMAN, BRIAN FEE, SCOTT MORSE, SAM HOOD** Storyboards

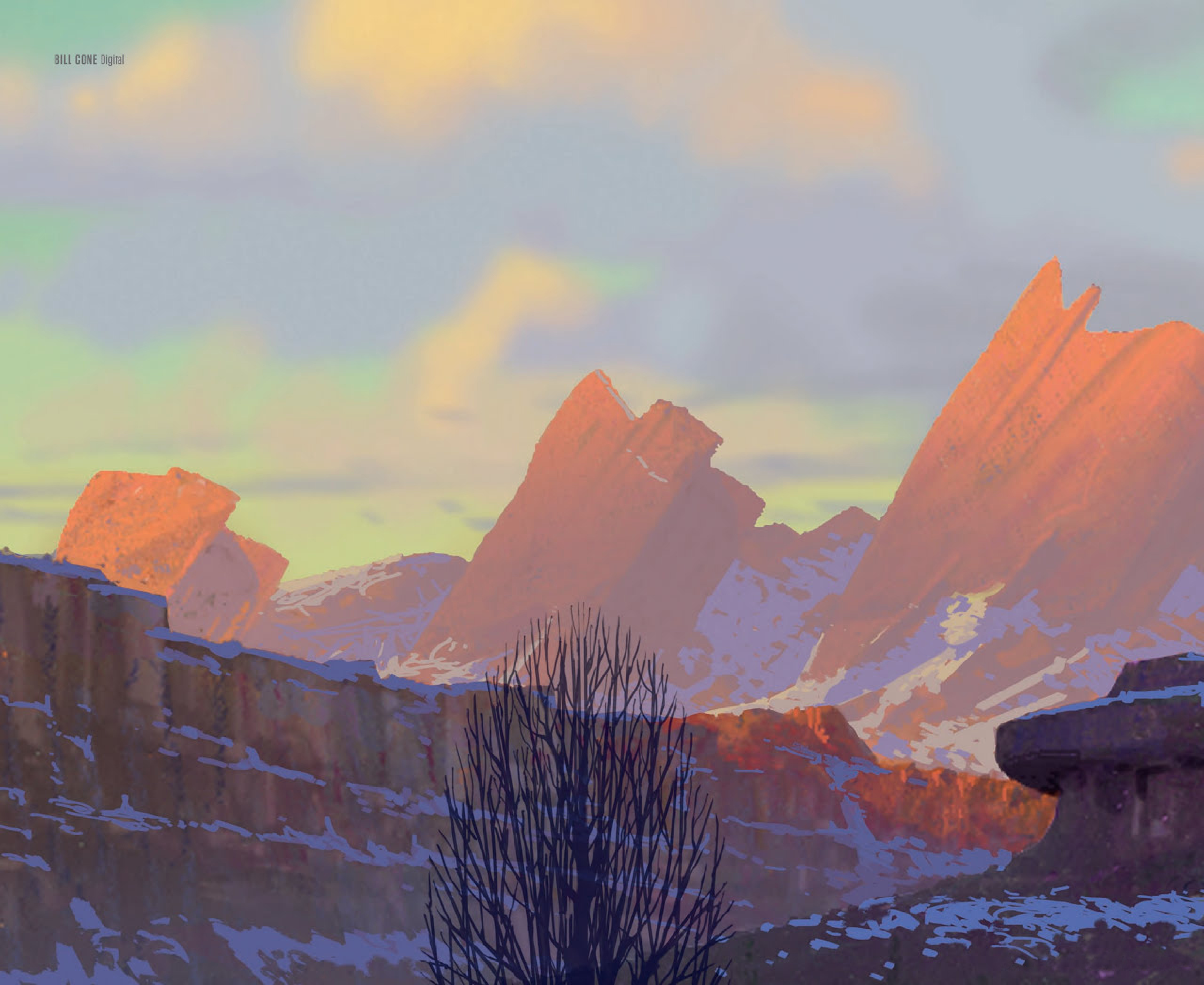


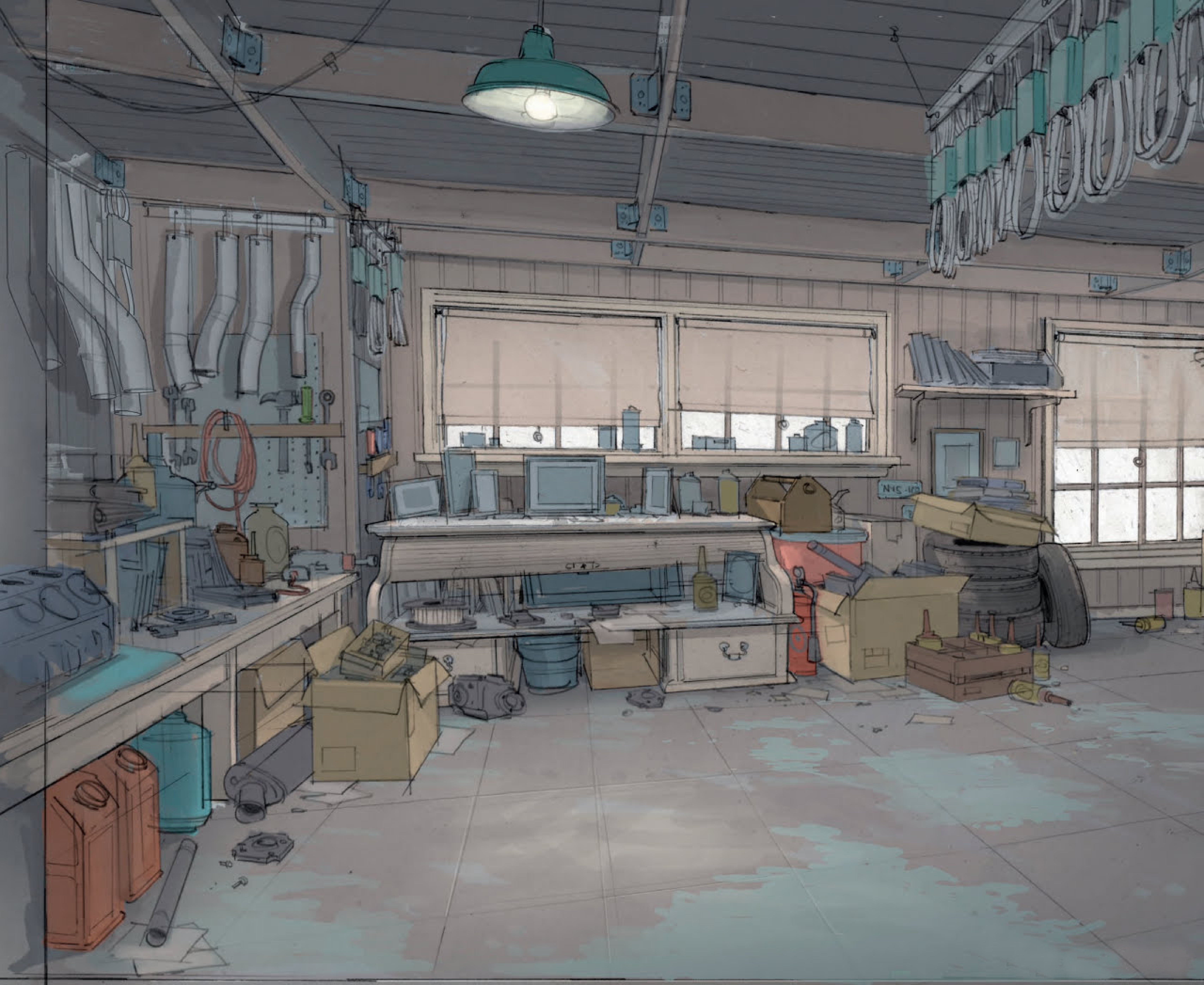


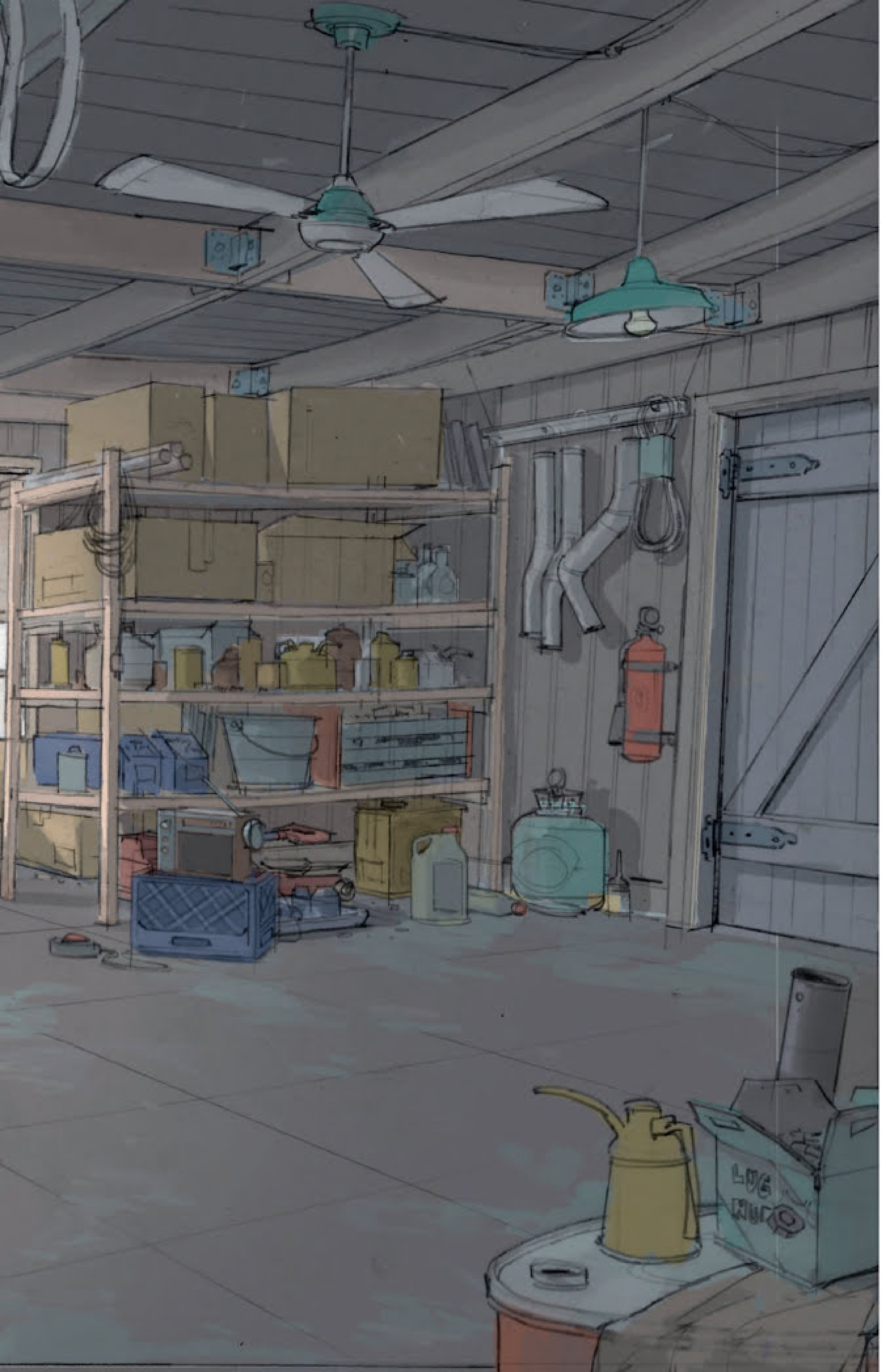
CRASH

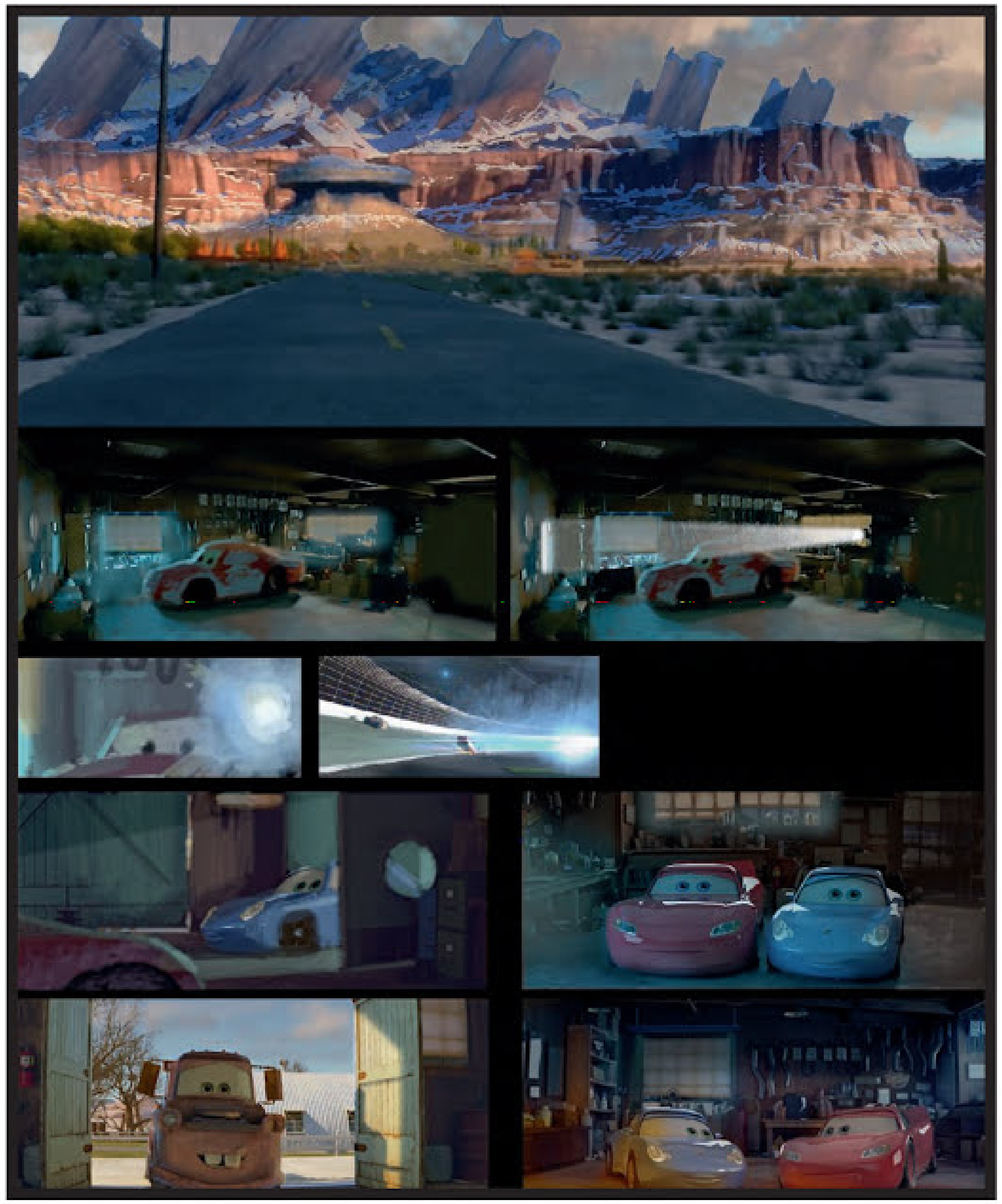
For McQueen's crash, we wanted to evoke a very visceral reaction from the audience. We studied a lot of racing crash footage, and tried to create a moment more intense than the King's crash in *Cars*. Sometimes you need to beat your heroes up in order to give them somewhere to go. The crash is us giving McQueen somewhere to go. The crash is the end result of Storm's arrival, and McQueen pushing himself beyond the limit.

—**JOHN HOFFMAN**, Story Artist







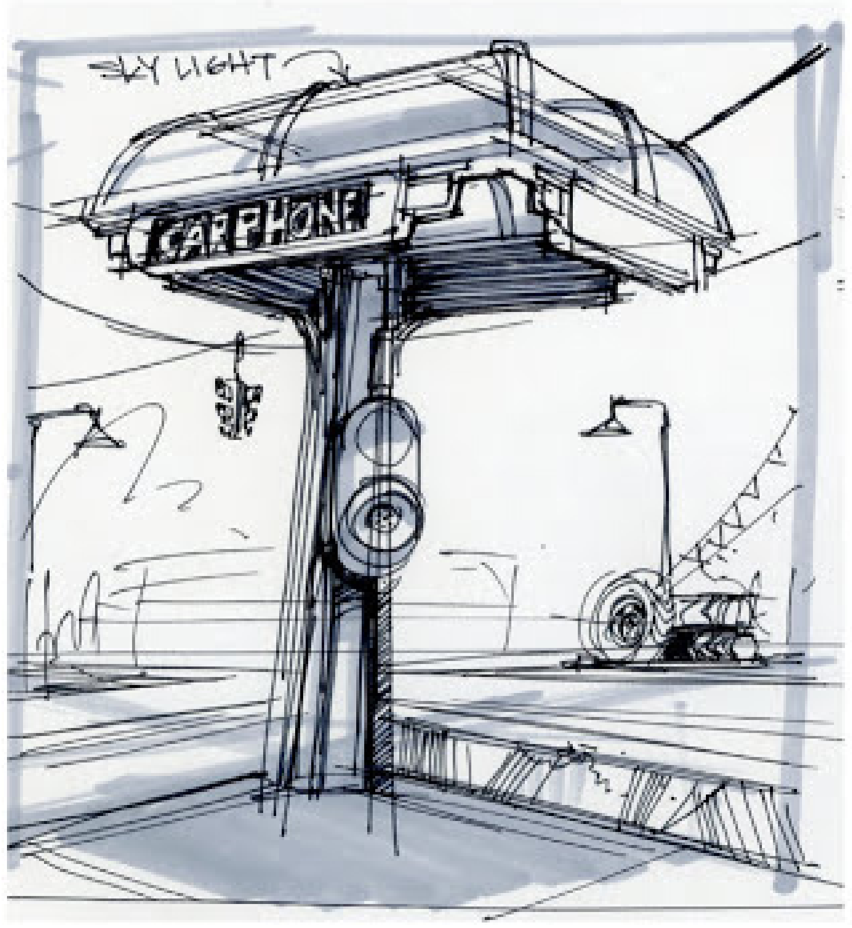


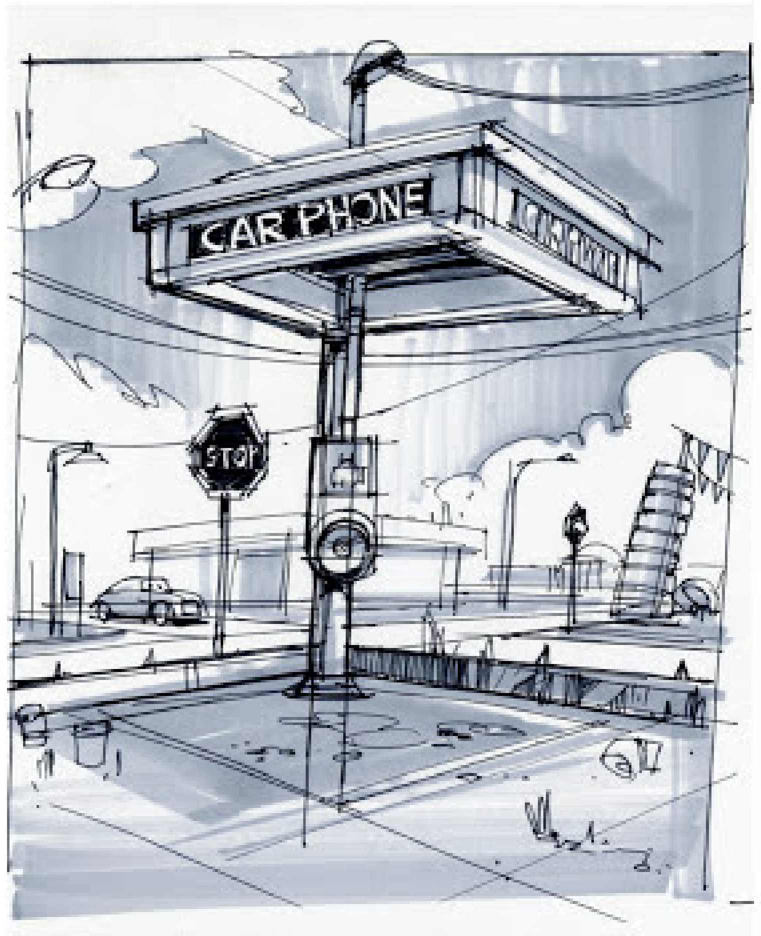
(left) **KRISTIAN NORELIUS** Digital; (above) **BILL CONE** Digital

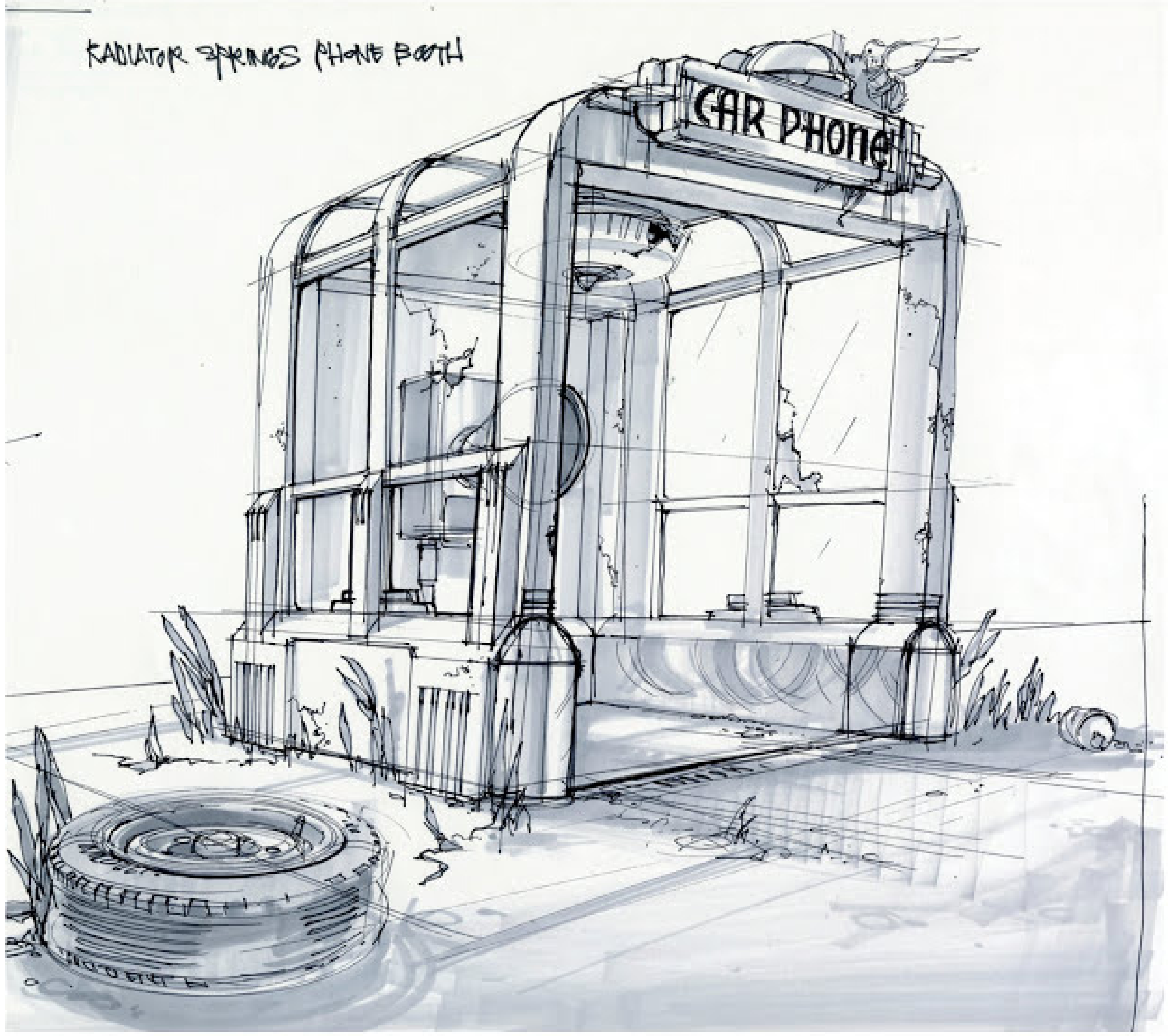
Back in 2001, when Jay Shuster came on board to help design *Cars*, one of the first things we threw at him was to design a pay phone for large mechanical creatures with no hands. That scene was cut from the story, but 15 years later, on *Cars 3*, a pay phone in Radiator Springs was in. By this time, a public phone was a vanishing relic in America, and in an era of cellphones with video, we decided to reverse engineer much of that current technology into a vintage package, as if the "videophone of the future" had been produced in the 1960s, and 45 years later, a functional specimen was still in use at Flo's V-8 Café.

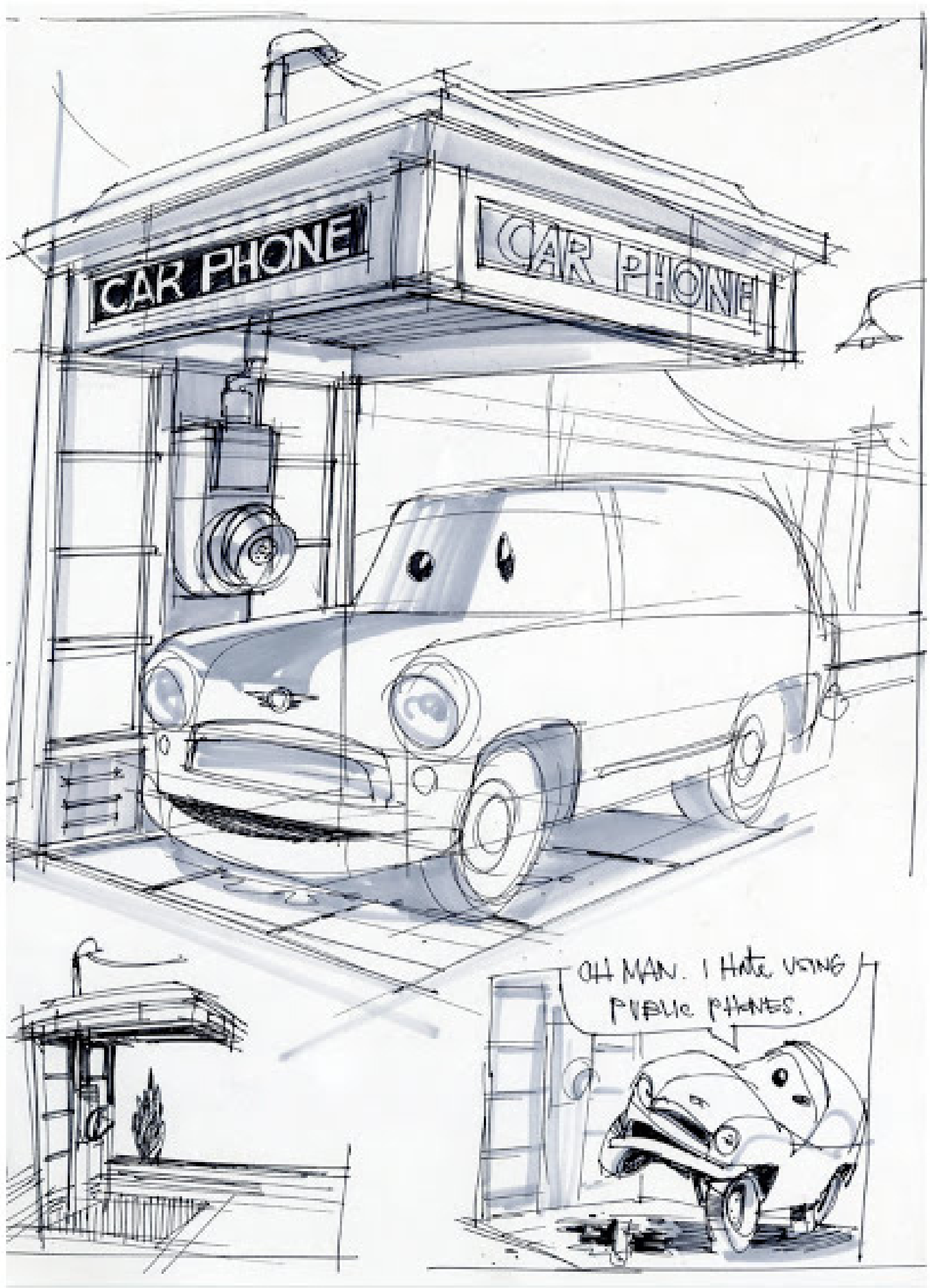
A perceptive viewer of this franchise will note that many devices are operated with a button, a lever, or happen offscreen, so that the characters don't reveal their relative inability to operate most devices that humans take for granted. In the case of the telephone, the content of what they're saying is usually far more important than explaining how they would dial, let alone pay for a phone call, so the designer is a bit off the hook, even though we have worked out solutions for it. To try and maintain recognizable form and behavior for objects common to our world, yet make it seem plausible that a car could operate it is the primary goal, all the while suppressing the viewer's curiosity about how they might physically accomplish it. These sorts of challenges are actually part of the fun of designing for this odd, parallel universe.

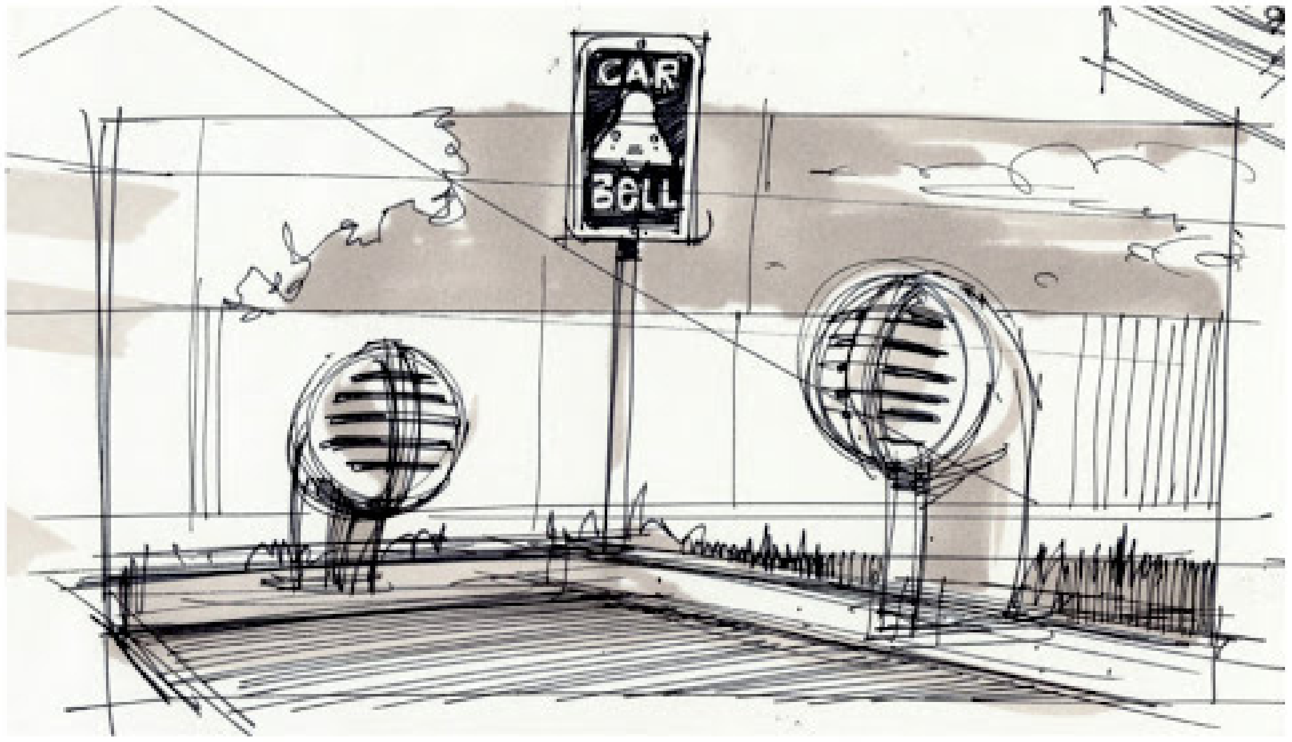
—**BILL CONE,** Production Designer

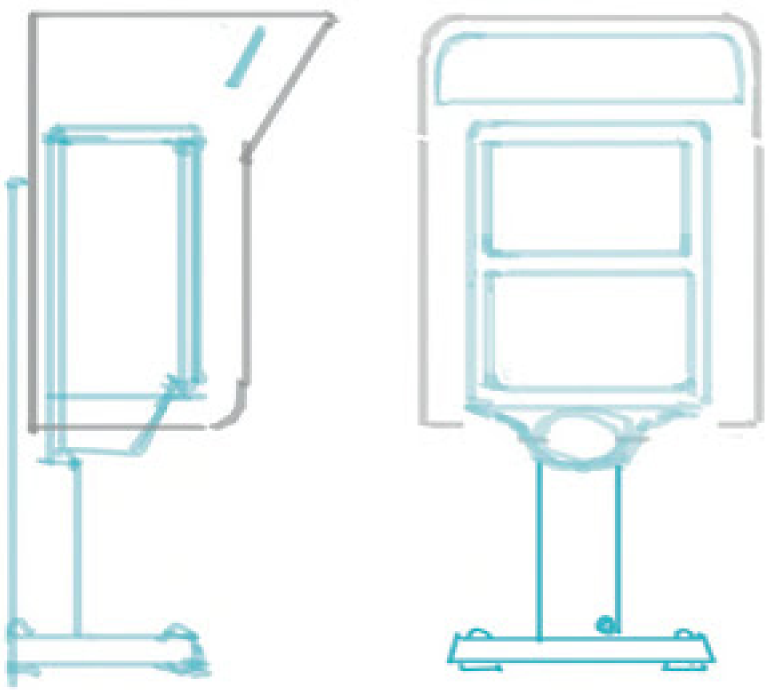


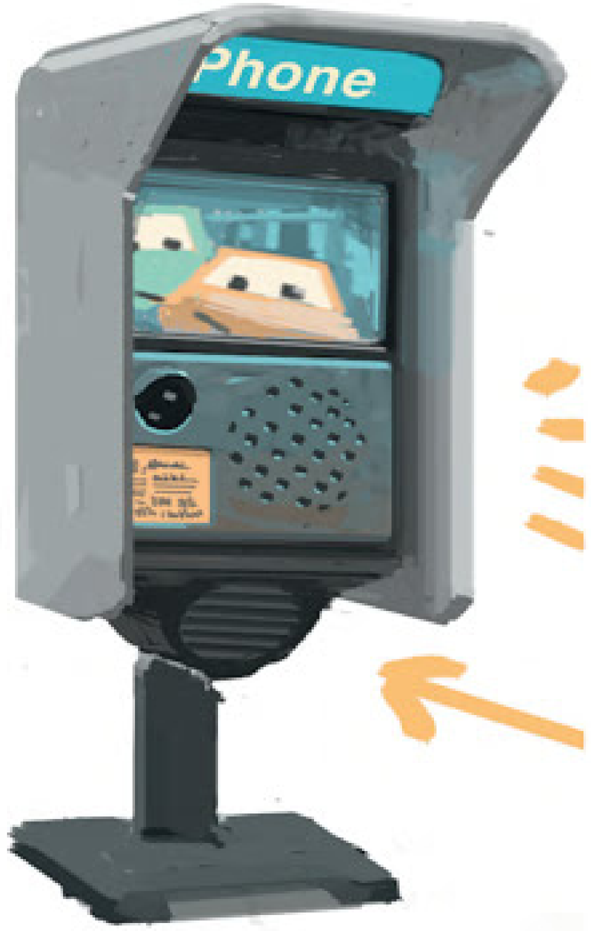


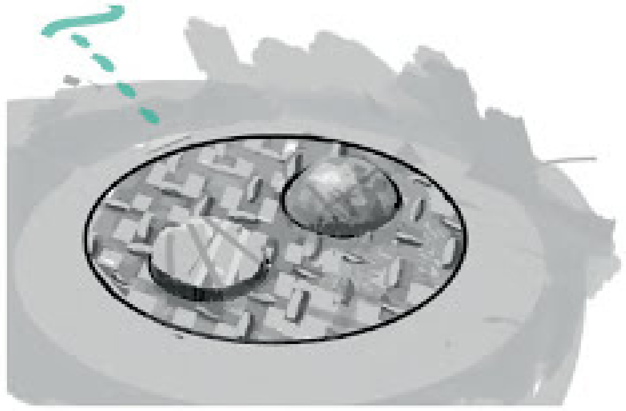


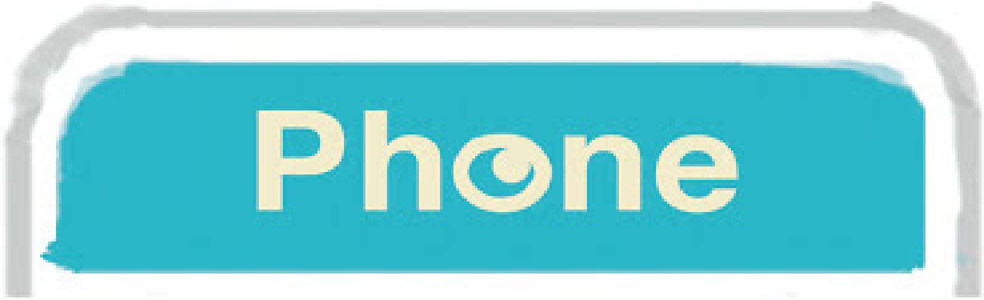

CAR PHONE
CAR PHONE
OH MAN. I Hate USING PUBLIC PHONES.

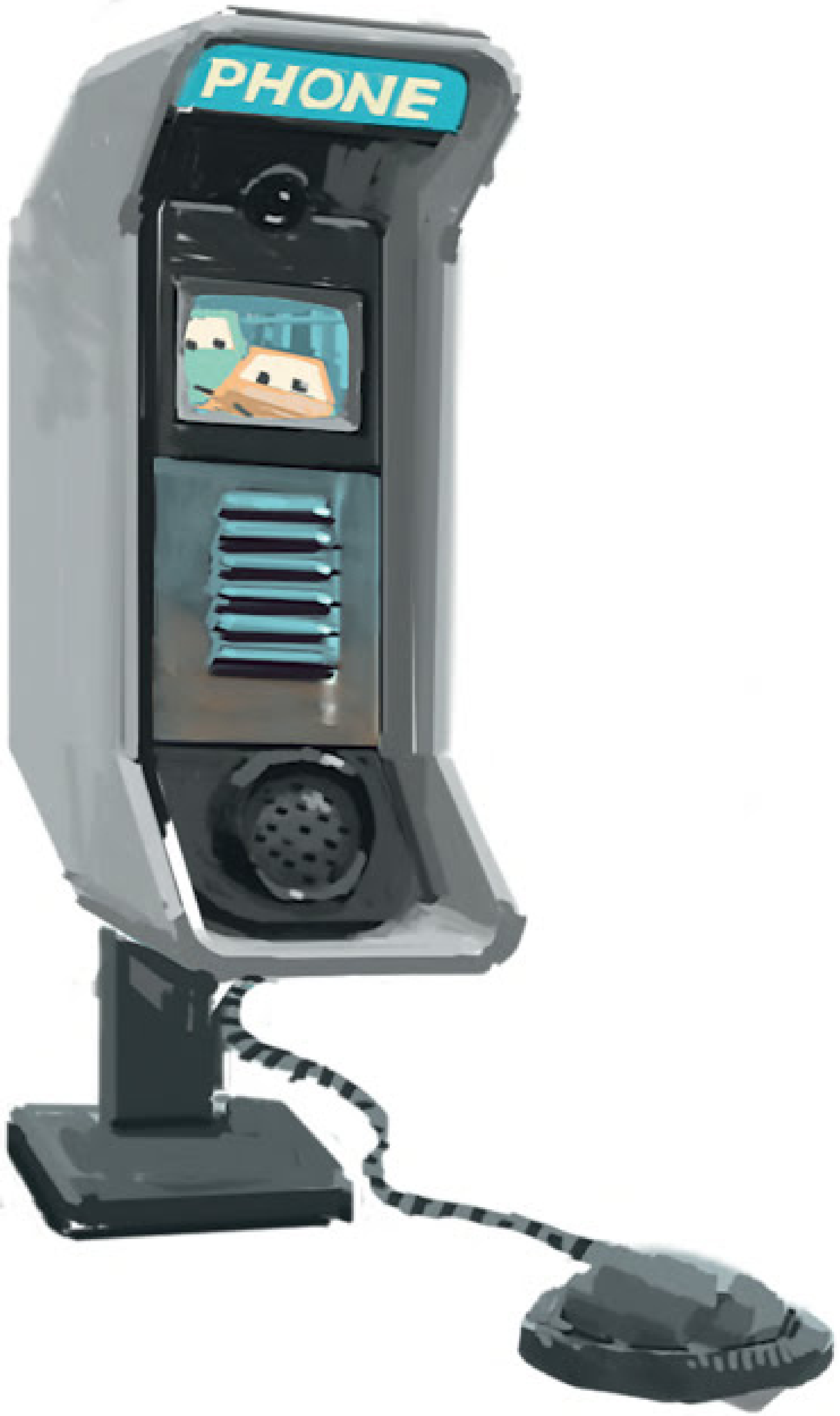




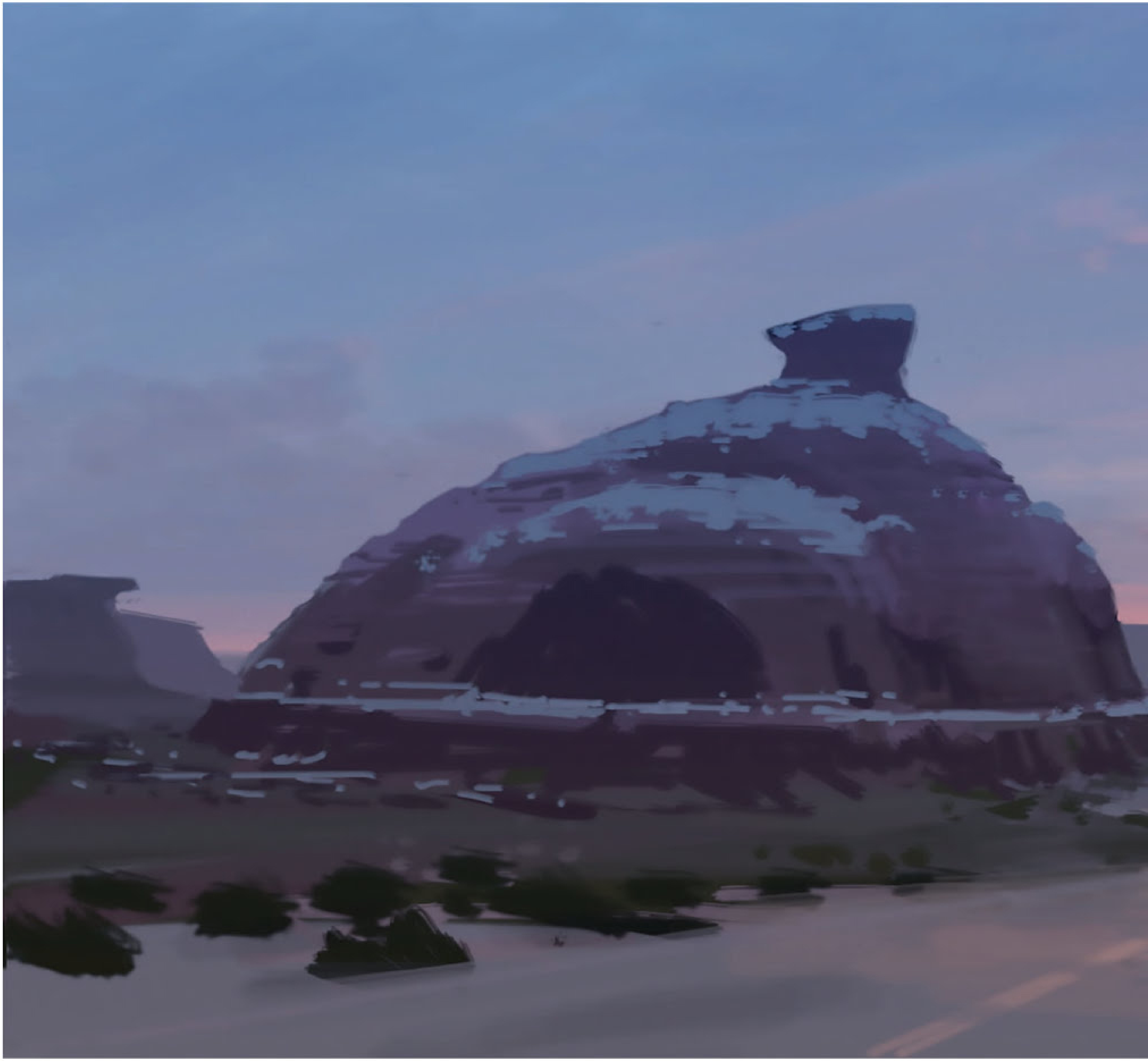


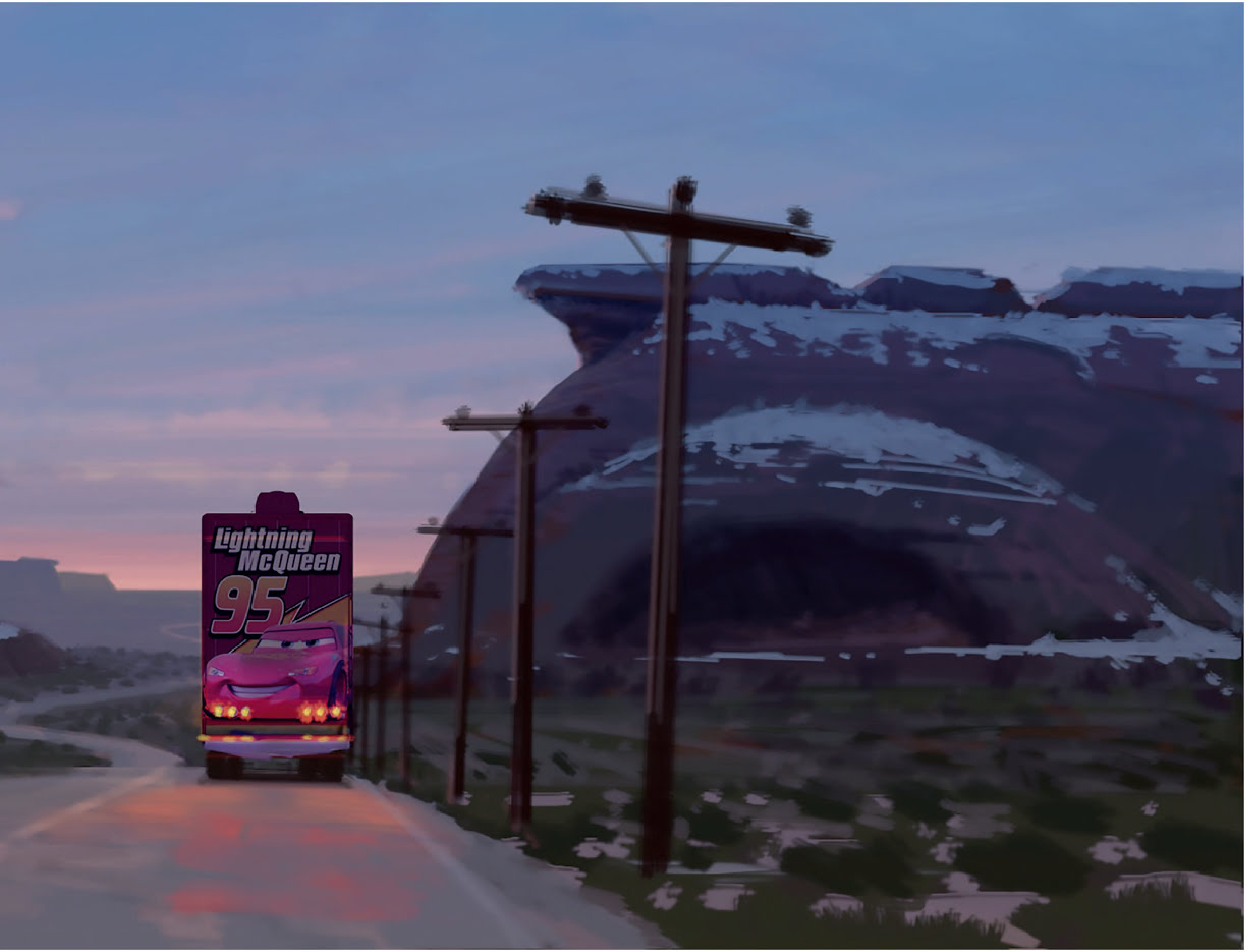


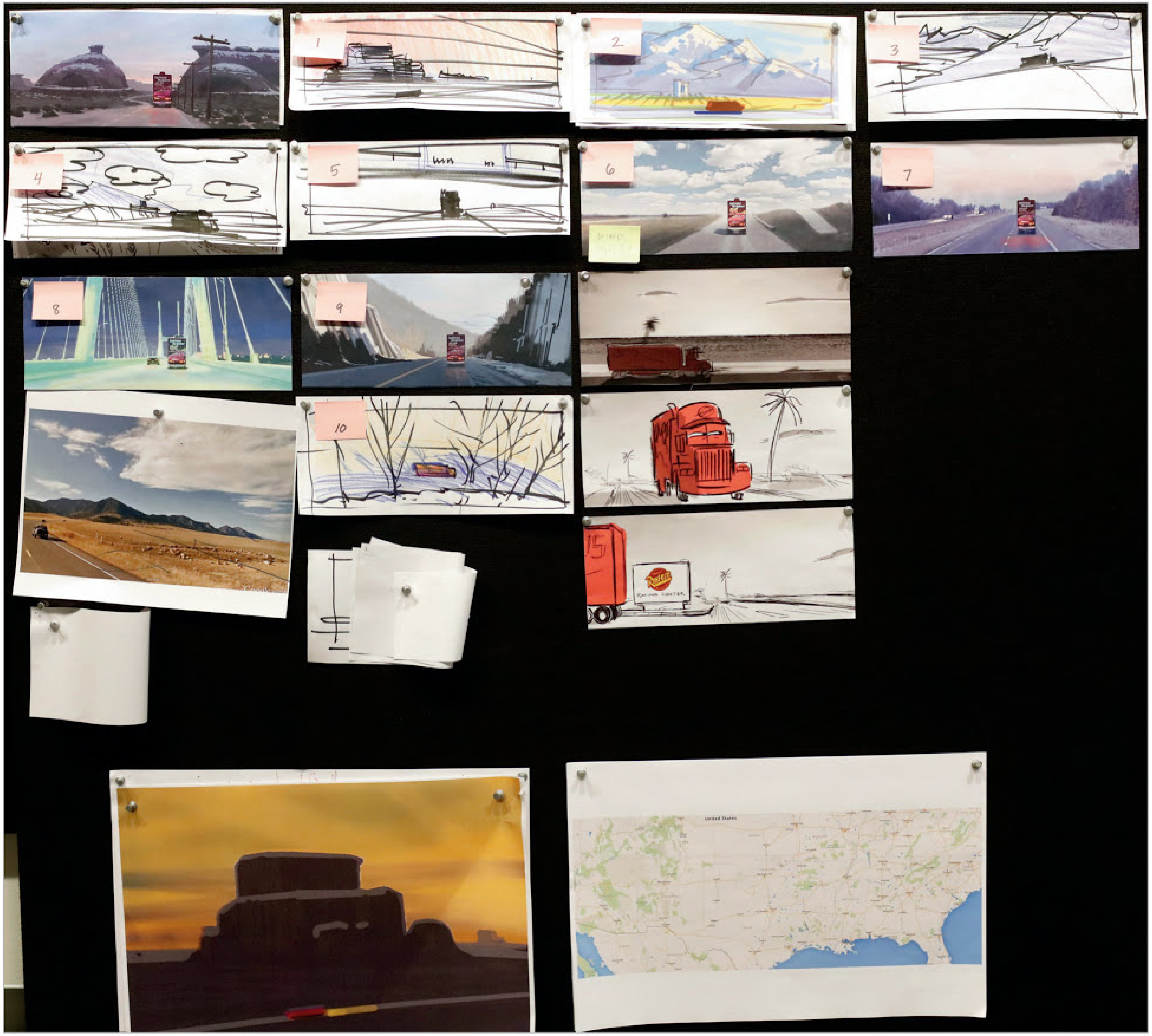


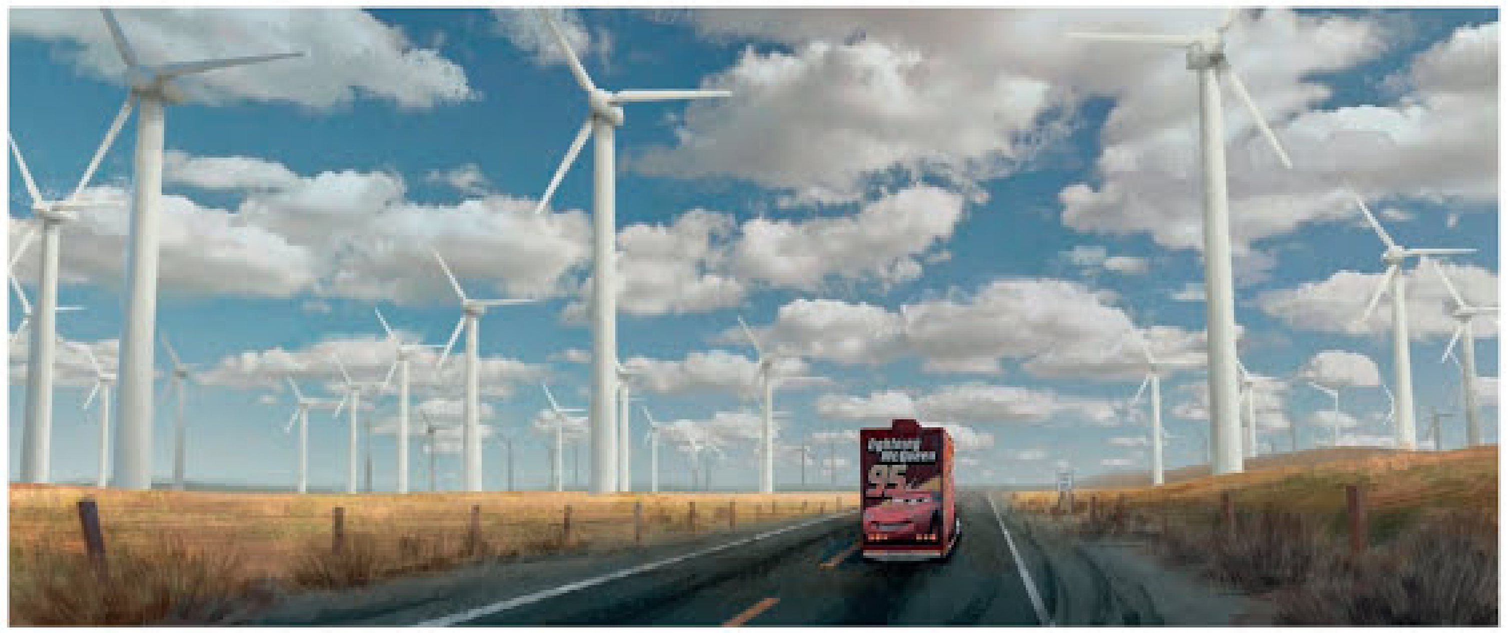


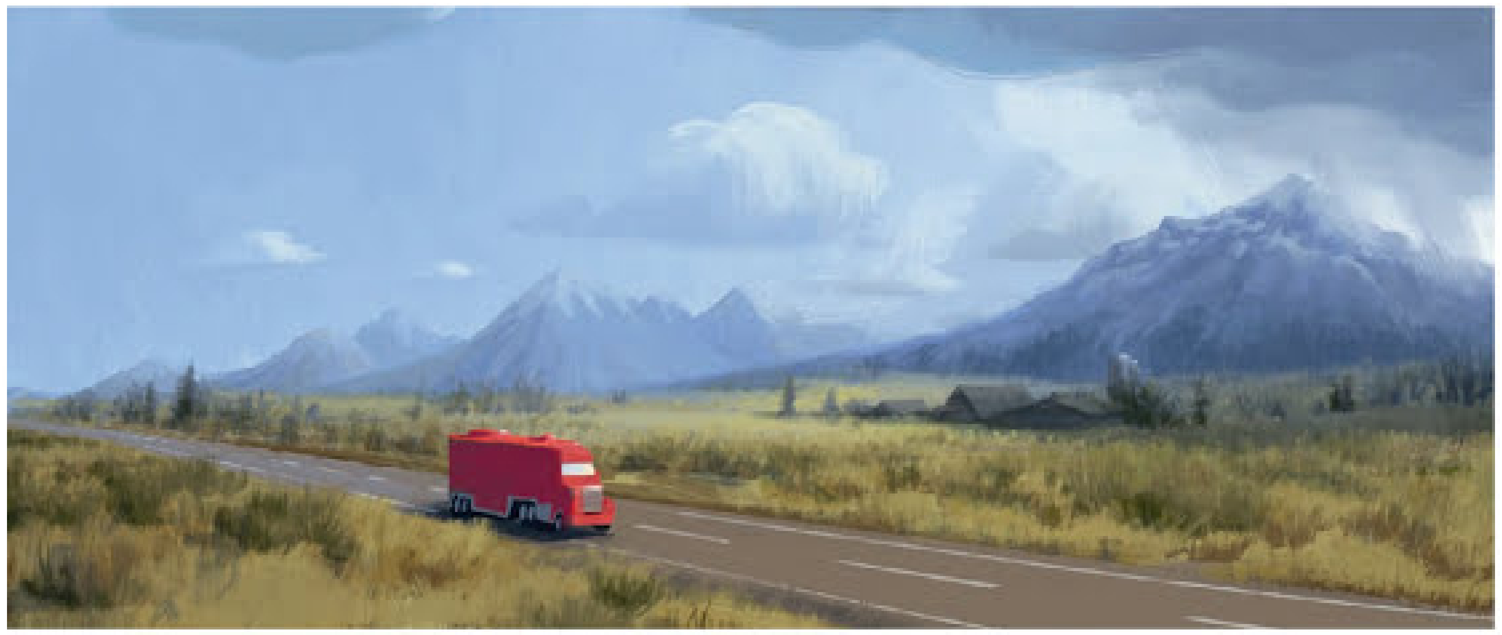
(left column) **JAY SHUSTER** Pen and marker; (middle column) **BILL CONE** Digital; (right column) **BILL CONE** Digital; (opposite) **JAY SHUSTER** Pen and marker

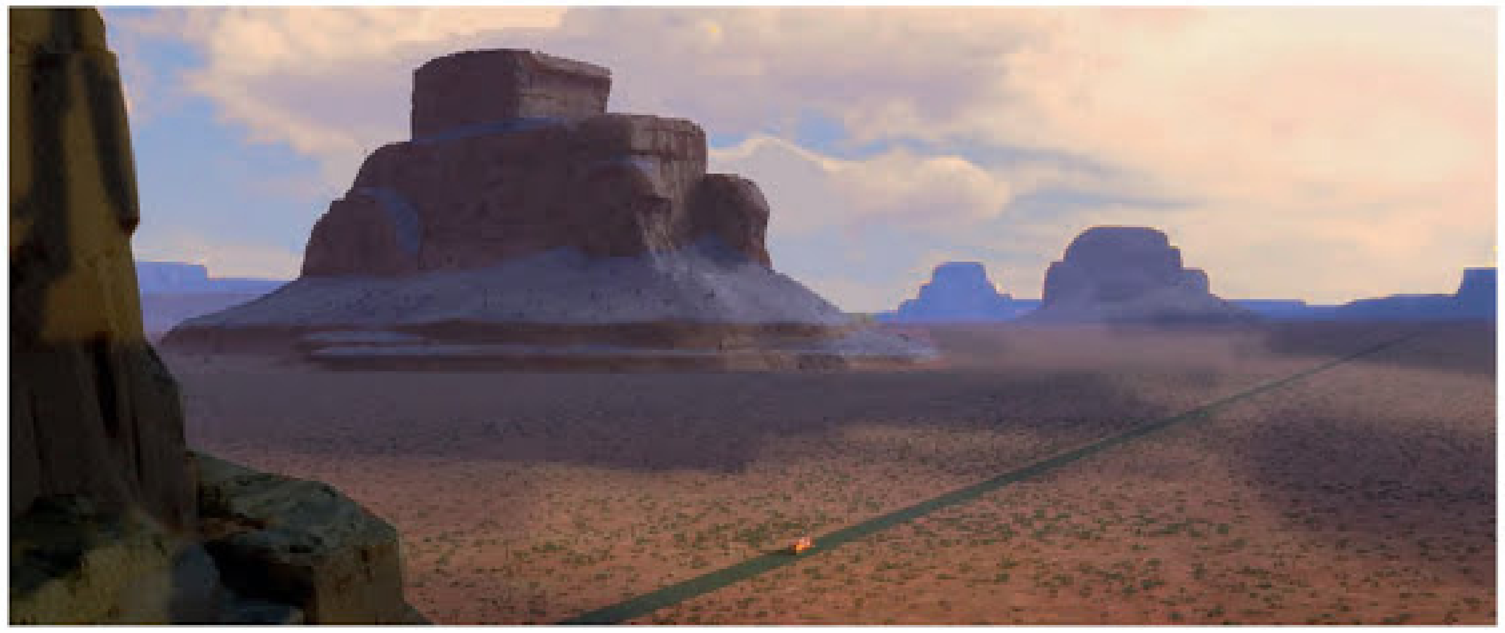


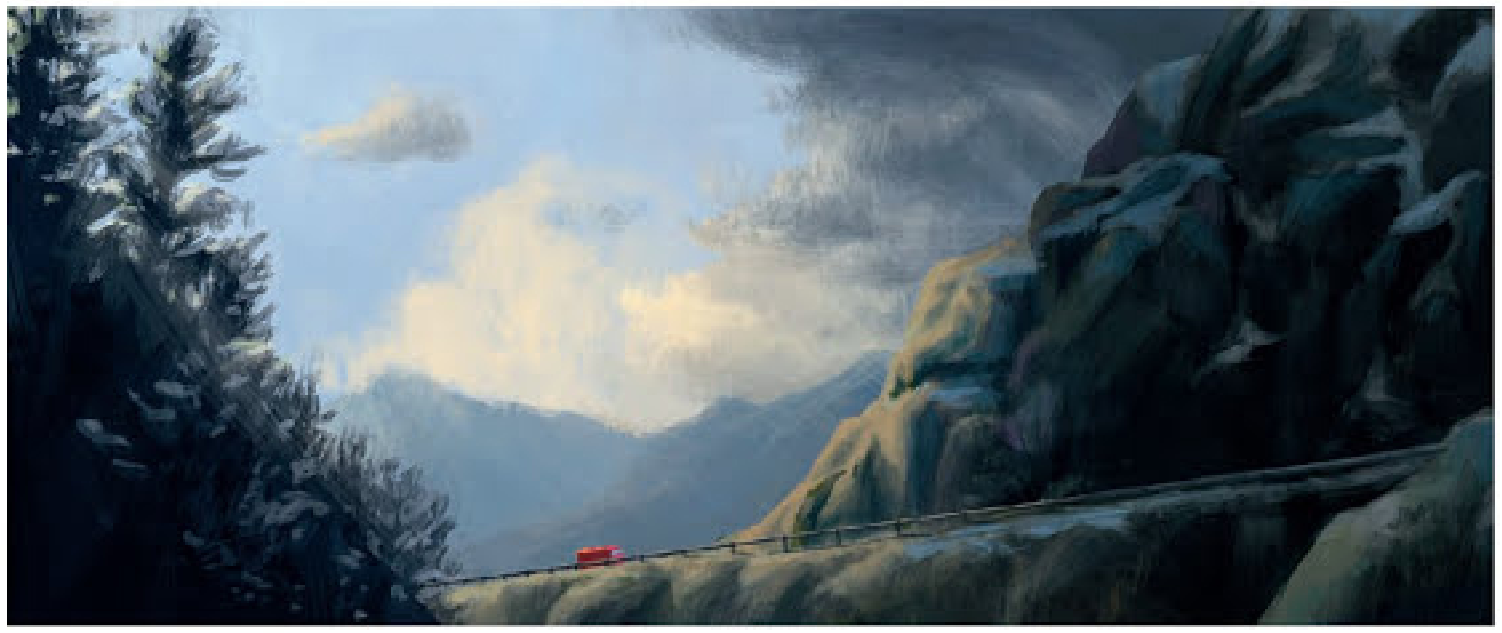

Lightning
McQueen
95

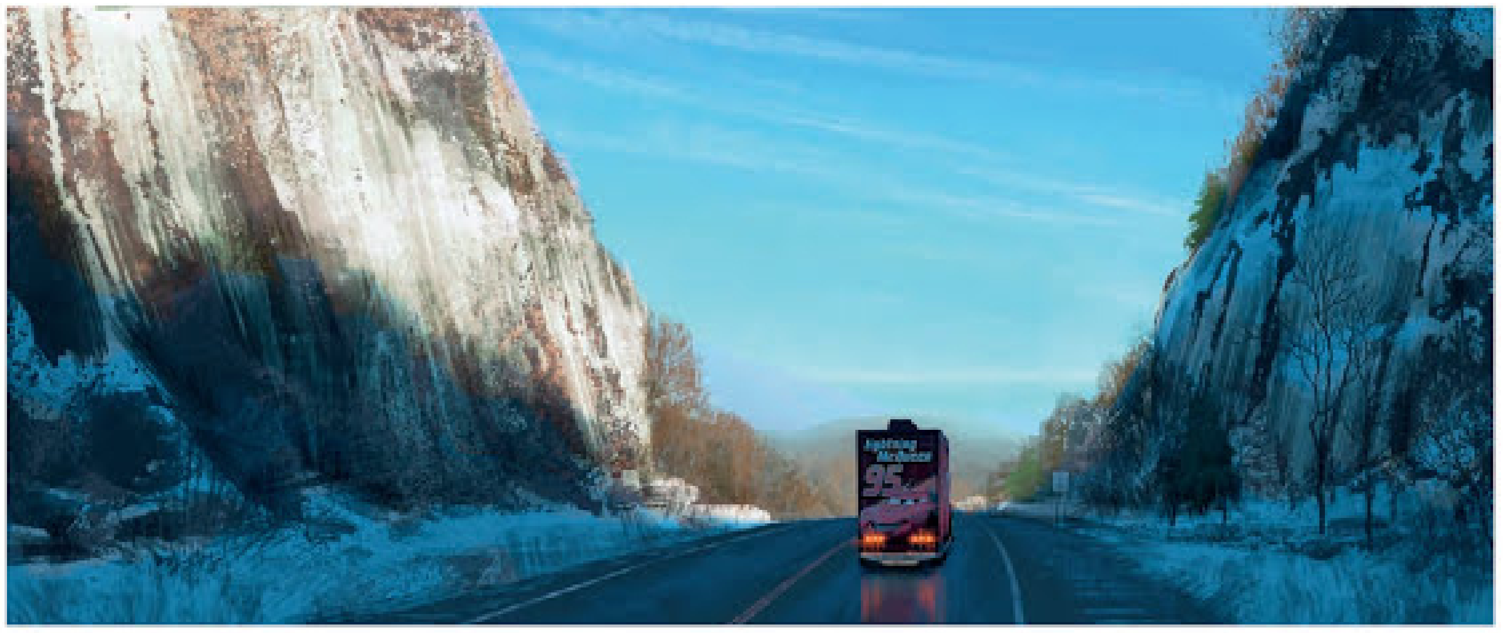

1
2
3
4
5
6
7
8
9
10
15
Racing Center
United States

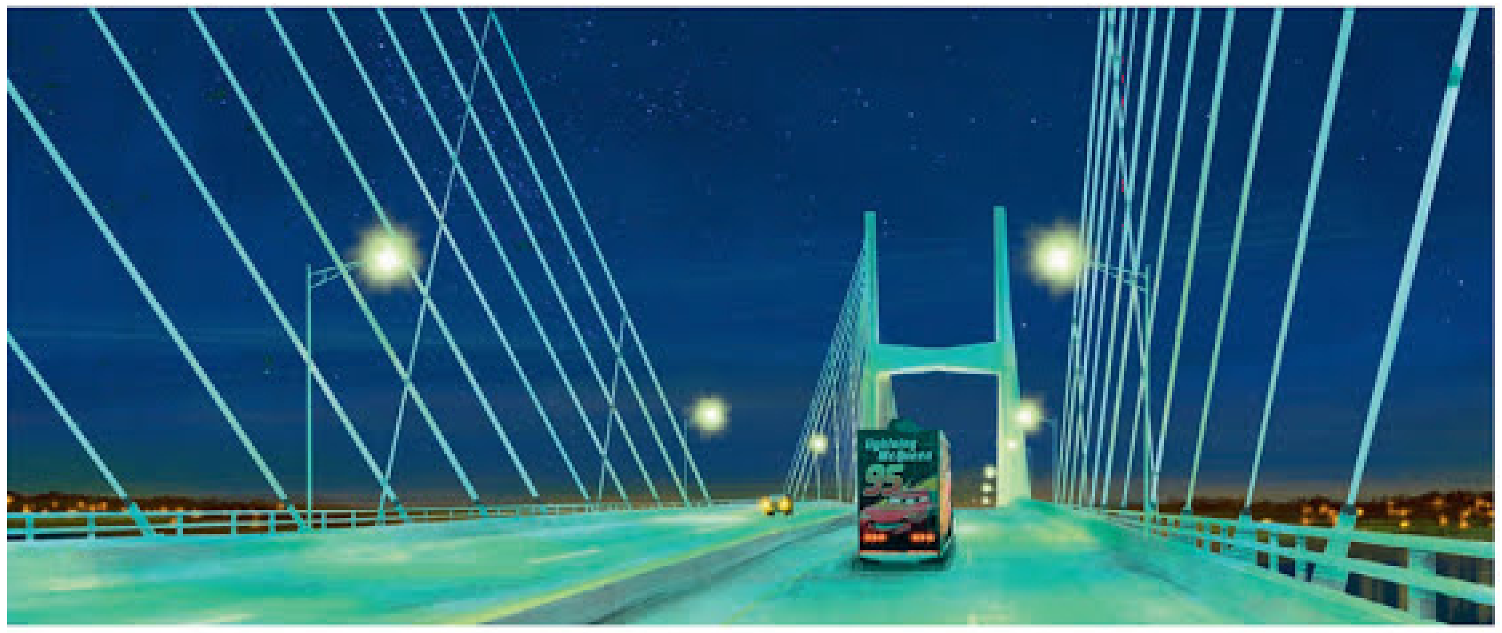

Lightning McQueen
95



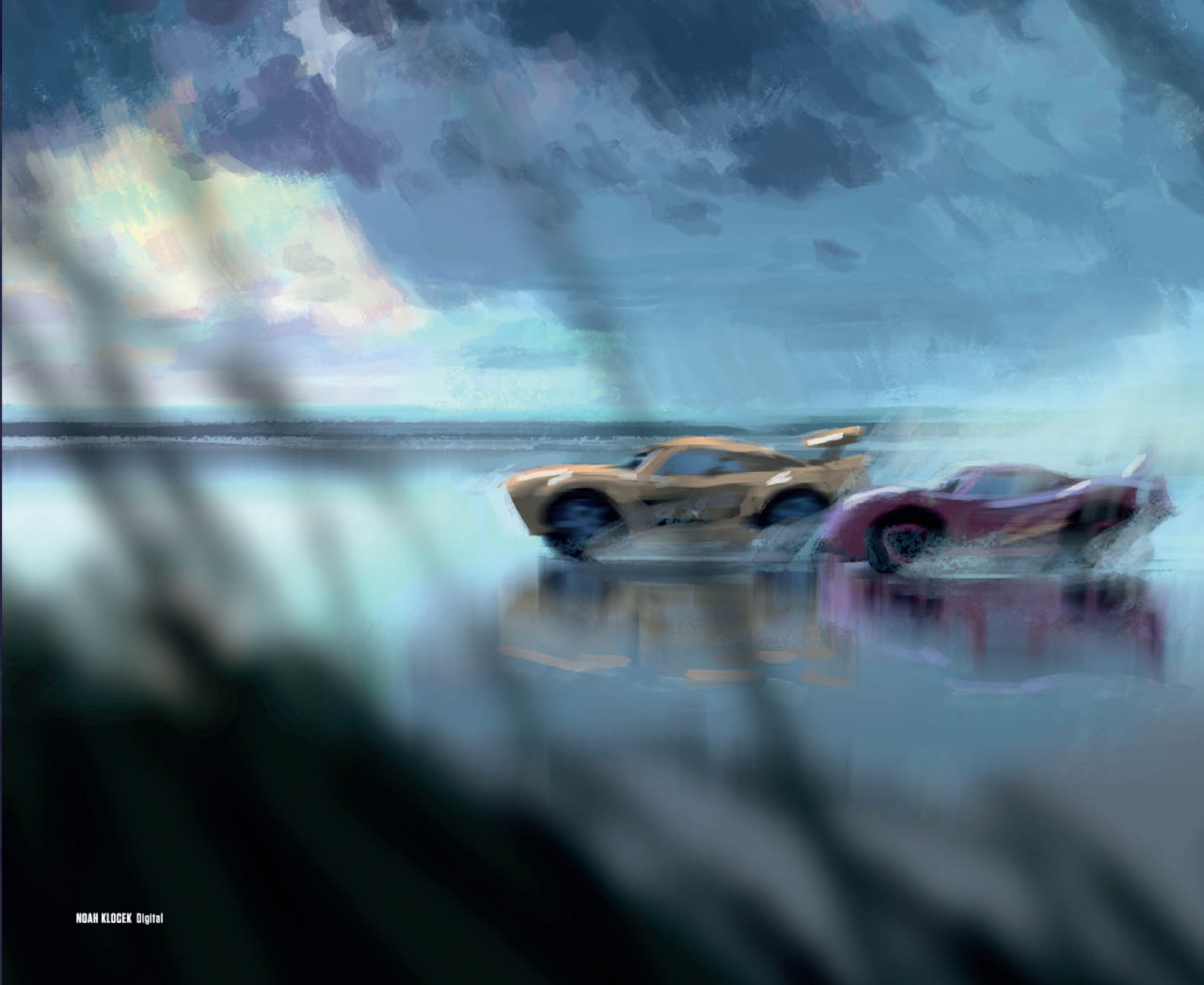





Lightning McQueen
95

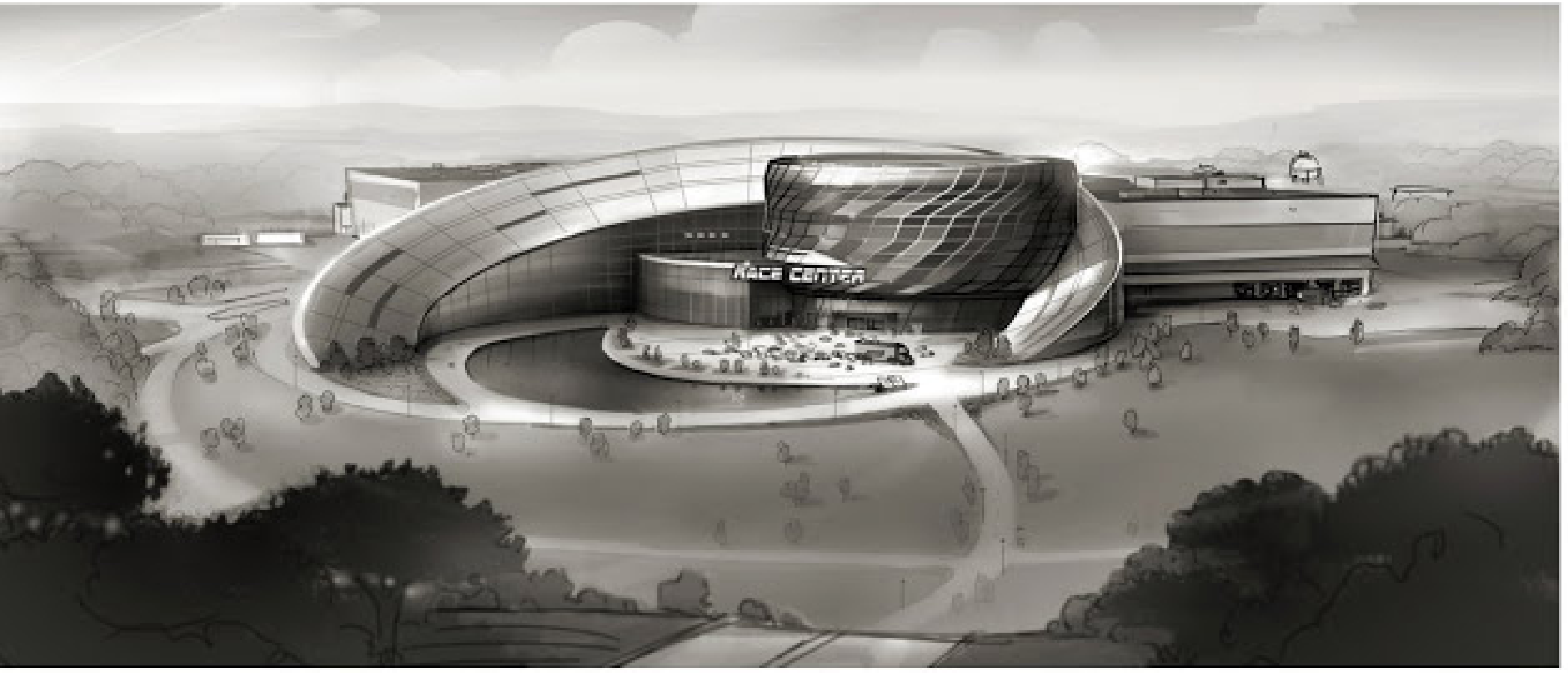

Lightning McQueen
95

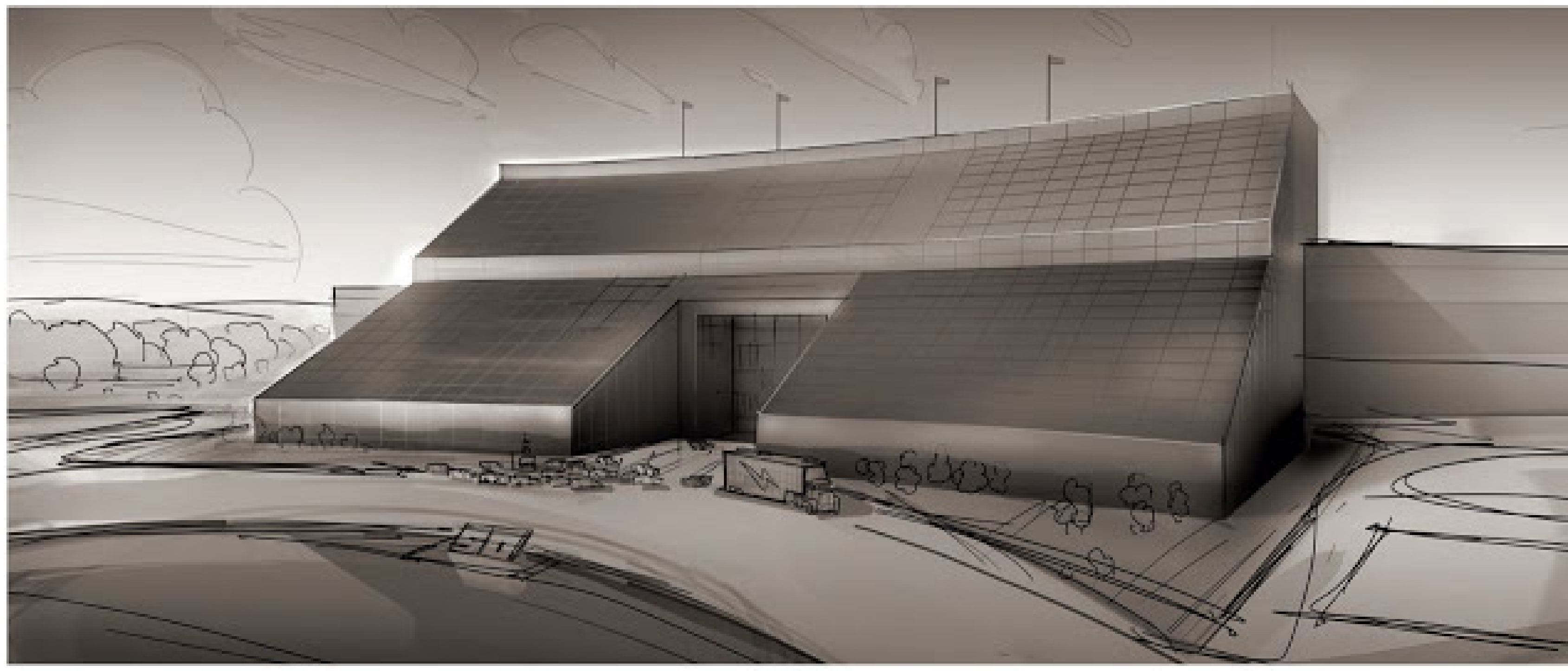
(top left) **PAUL ABADILLA** Digital; (center left) **BILL CONE** Digital;
(bottom left) **PAUL ABADILLA** Digital; (top right) **JENNIFER CHANG** Digital; (center right) **JENNIFER CHANG** Digital;
(bottom right) **PAUL ABADILLA** Digital; (opposite) **DEBORAH COLEMAN** Digital photograph

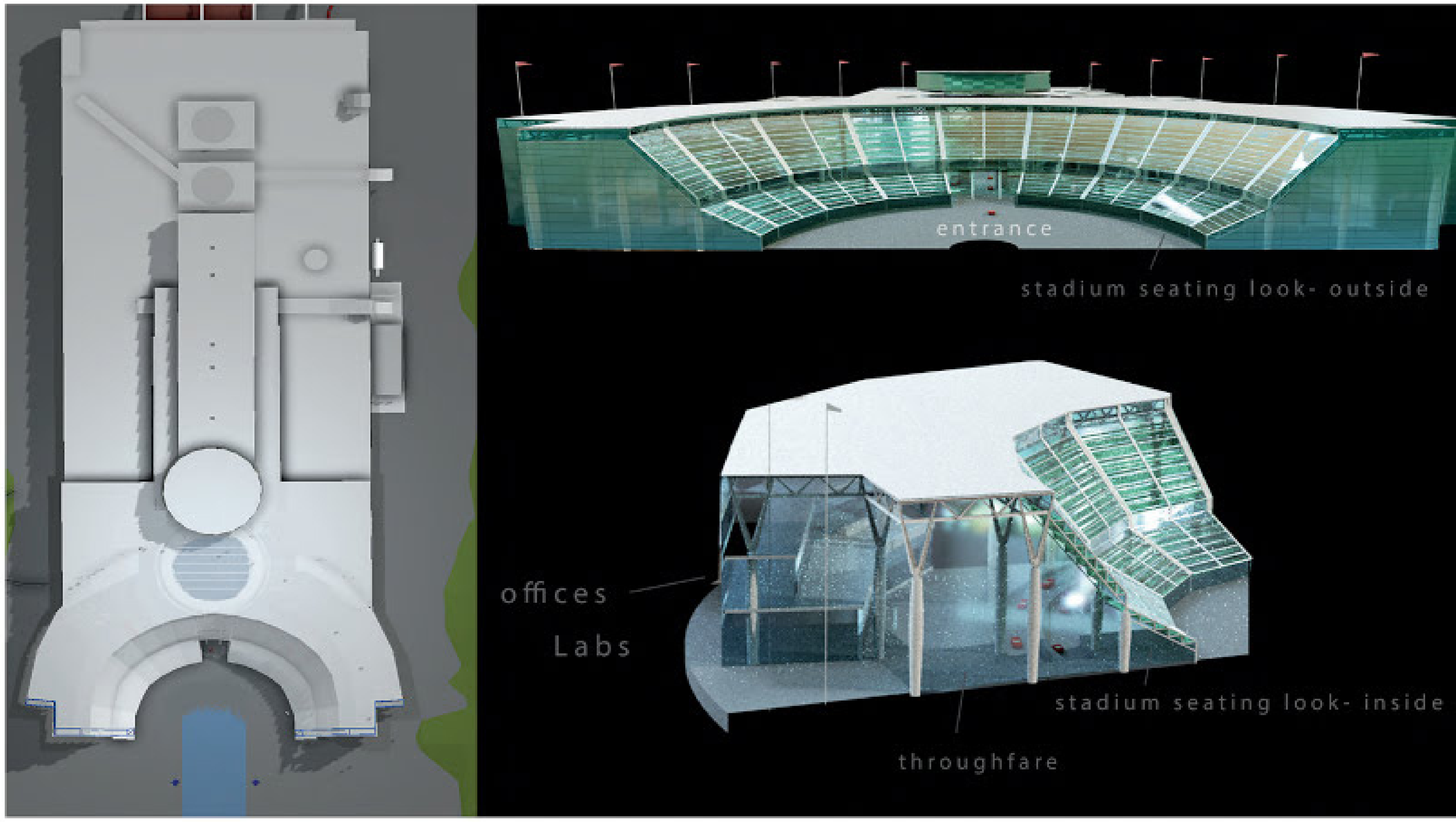


NOAH KLOCEK Digital

ACT TWO


RACE CENTER

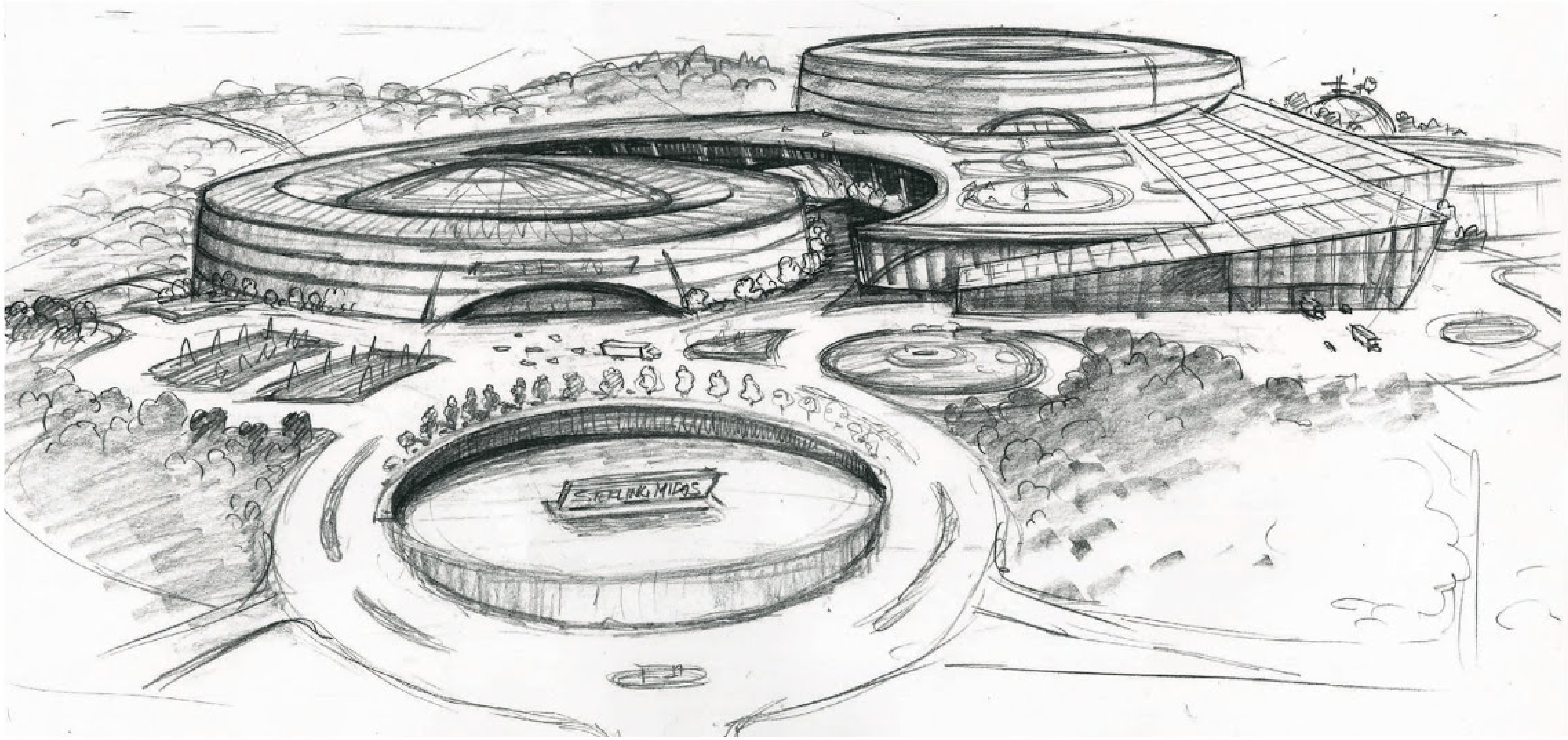



entrance
stadium seating look- outside
offices
Labs
stadium seating look- inside
throughfare

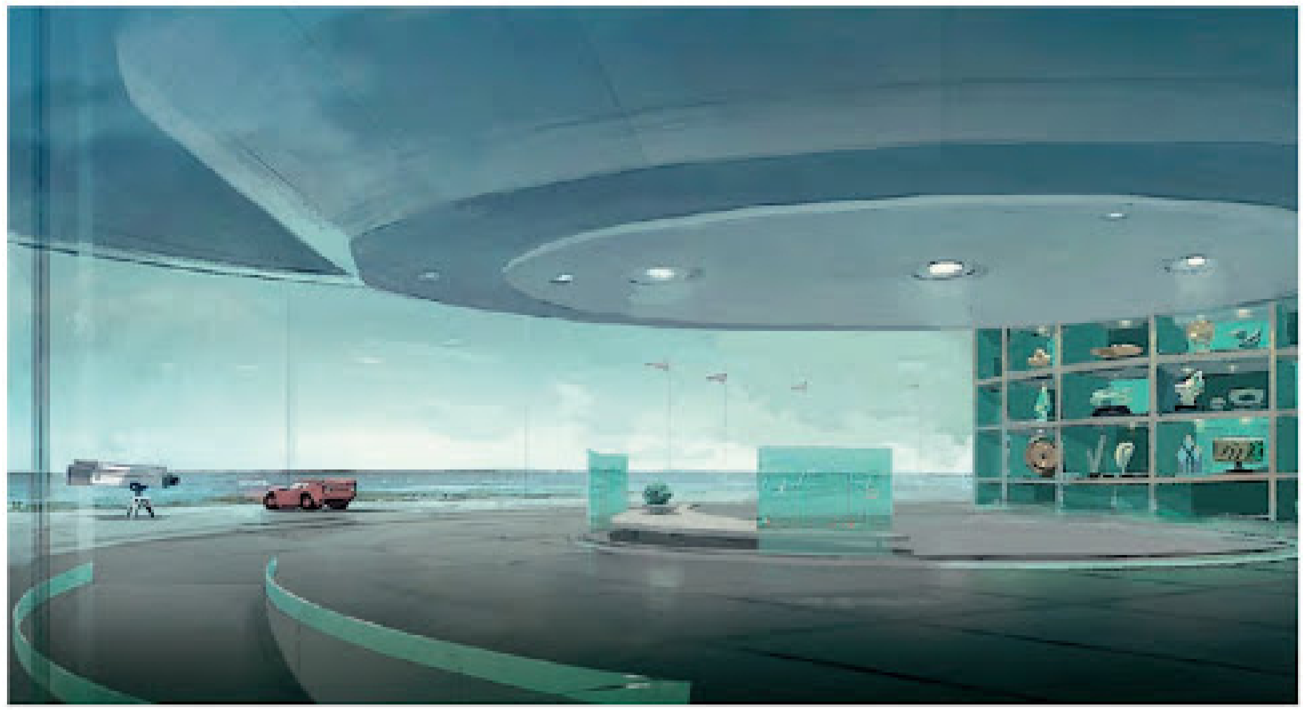
The Rust-Eze Racing Center started out as a riff on the GM Tech Center of the 50's, where co-production designer Jay Shuster's father once worked, and then evolved into a somewhat 'car-ified' structure with a wheel and a track motif. We then explored the idea of using a stadium, or a grandstand form, like what would be seen at a racetrack, to expand the vocabulary of the car-ification of this world to include non-car shaped forms that would nonetheless be familiar to cars.

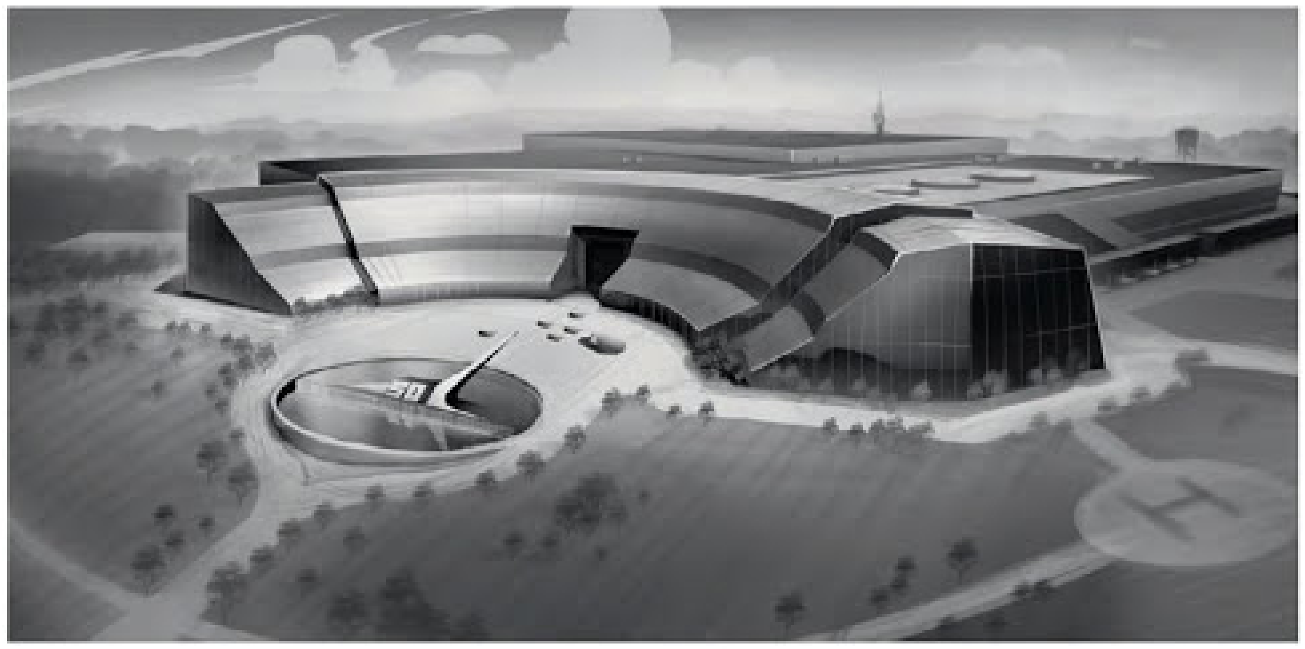
In addition, the grandstand motif had an underlying theme to it. By entering the building, McQueen was symbolically exiting a racetrack, fulfilling Sterling's plan to retire McQueen and give the number 95 to a younger racer.

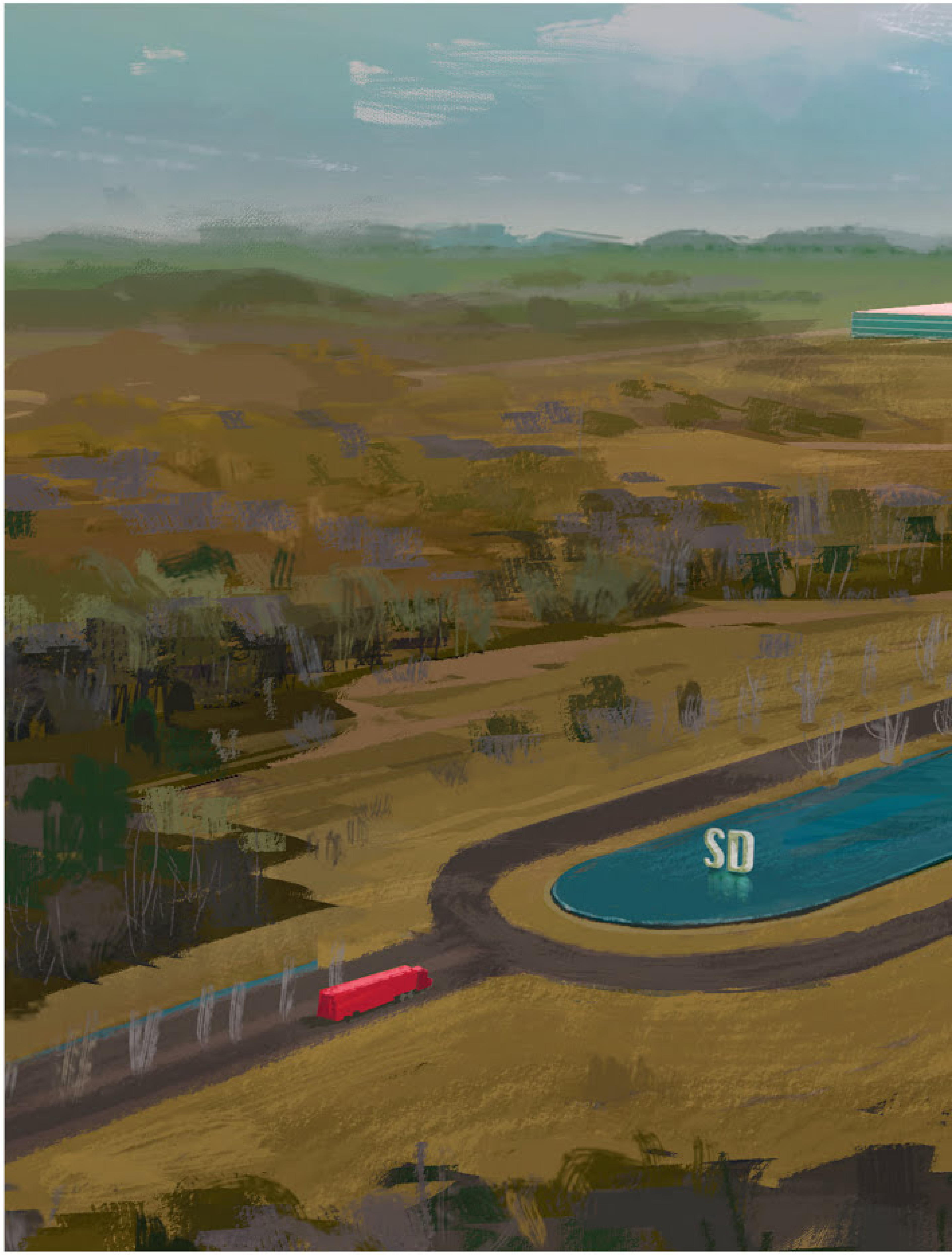
—**BILL CONE,** Production Designer



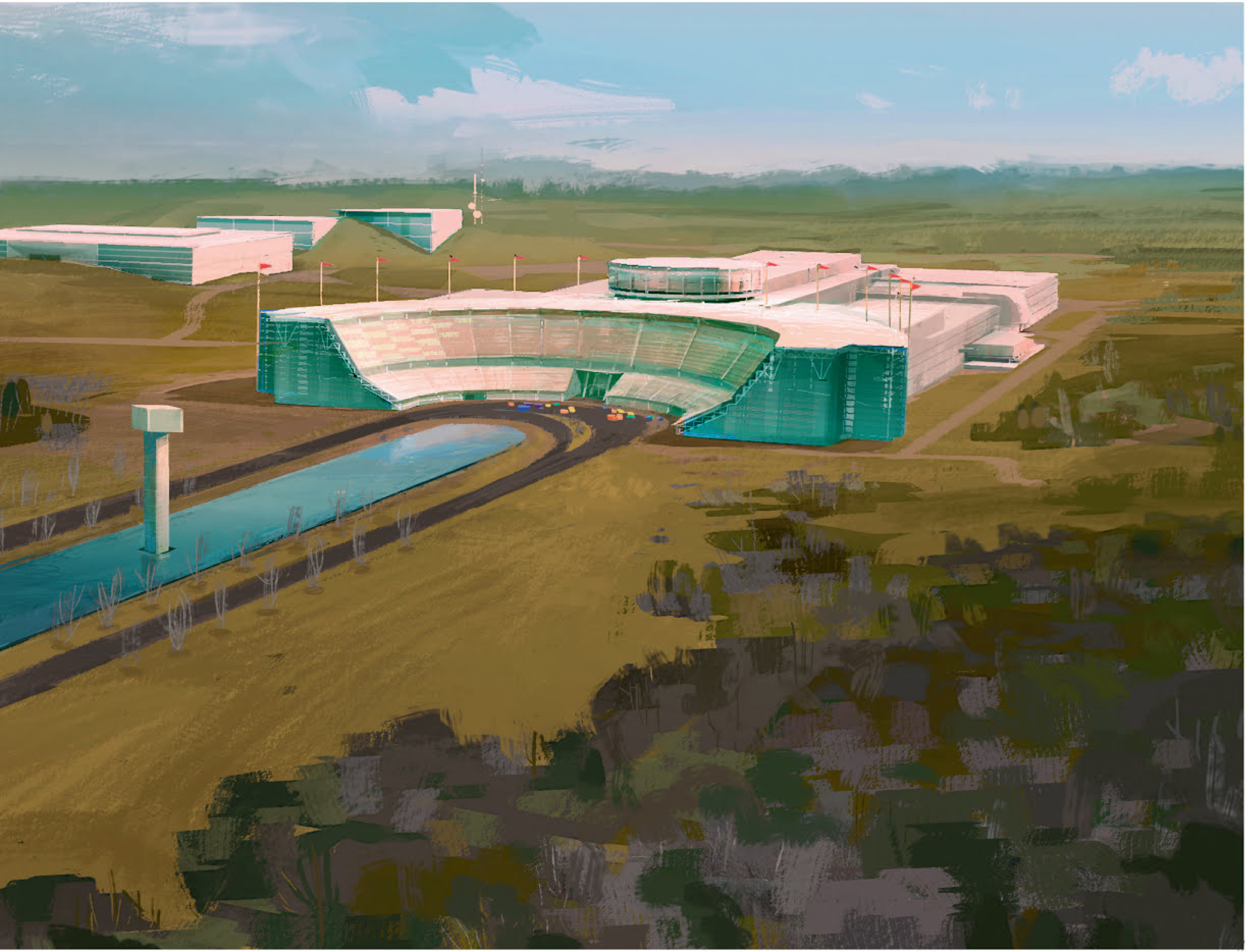
GARRETT TAYLOR Pencil; (opposite top row) **GARRETT TAYLOR** Digital; (opposite bottom) Design by **KYLE MACNAUGHTON,** Model by **STEVE KARSKI AND IVO KOS,** Shading by **THOMAS JORDAN** Digital



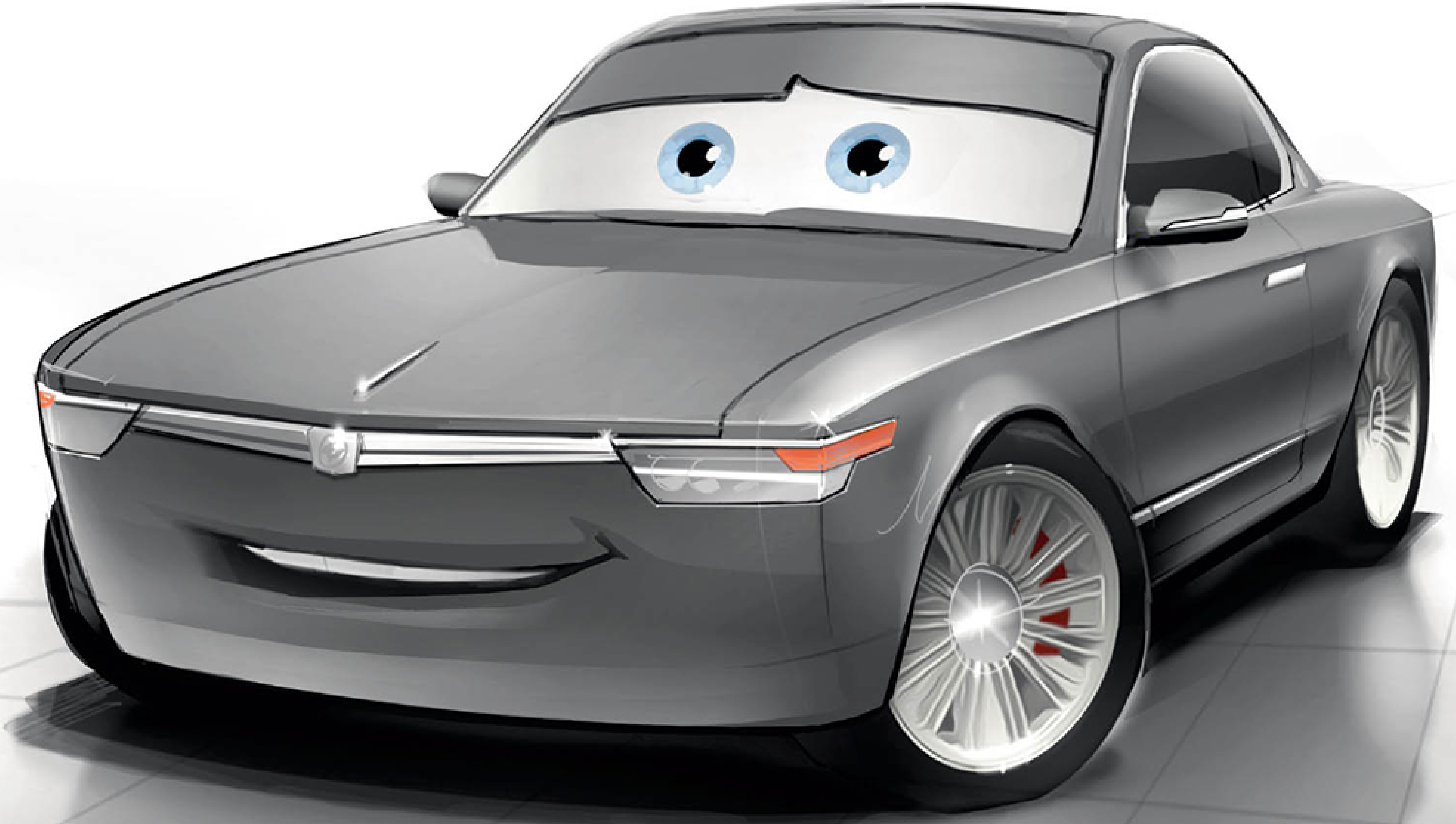


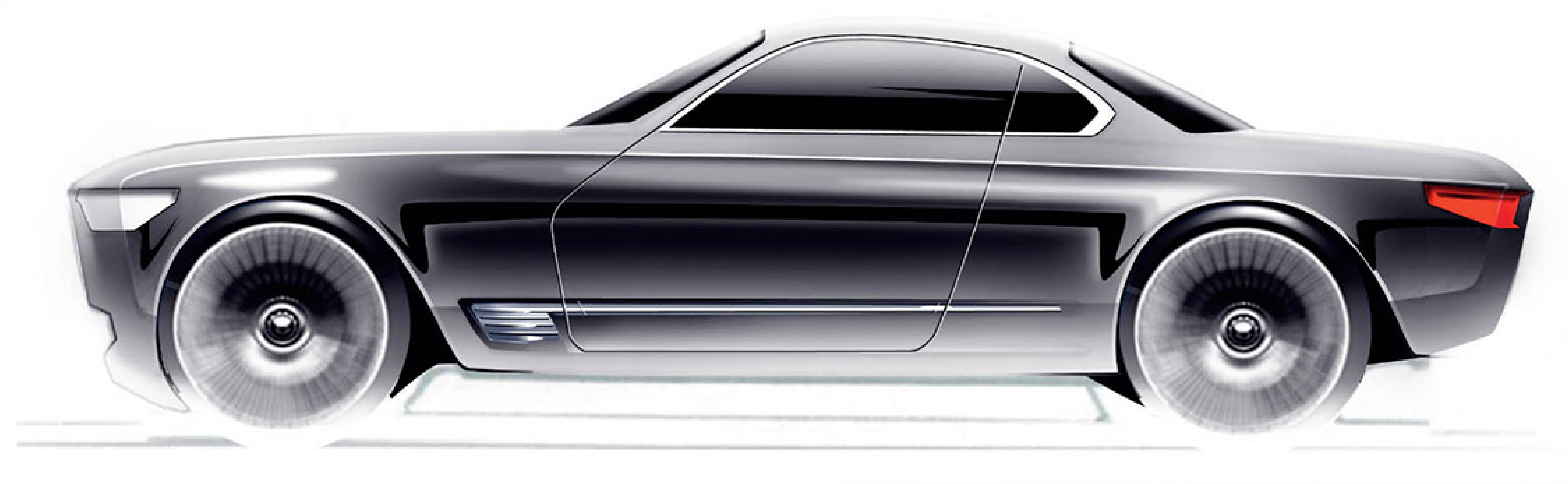


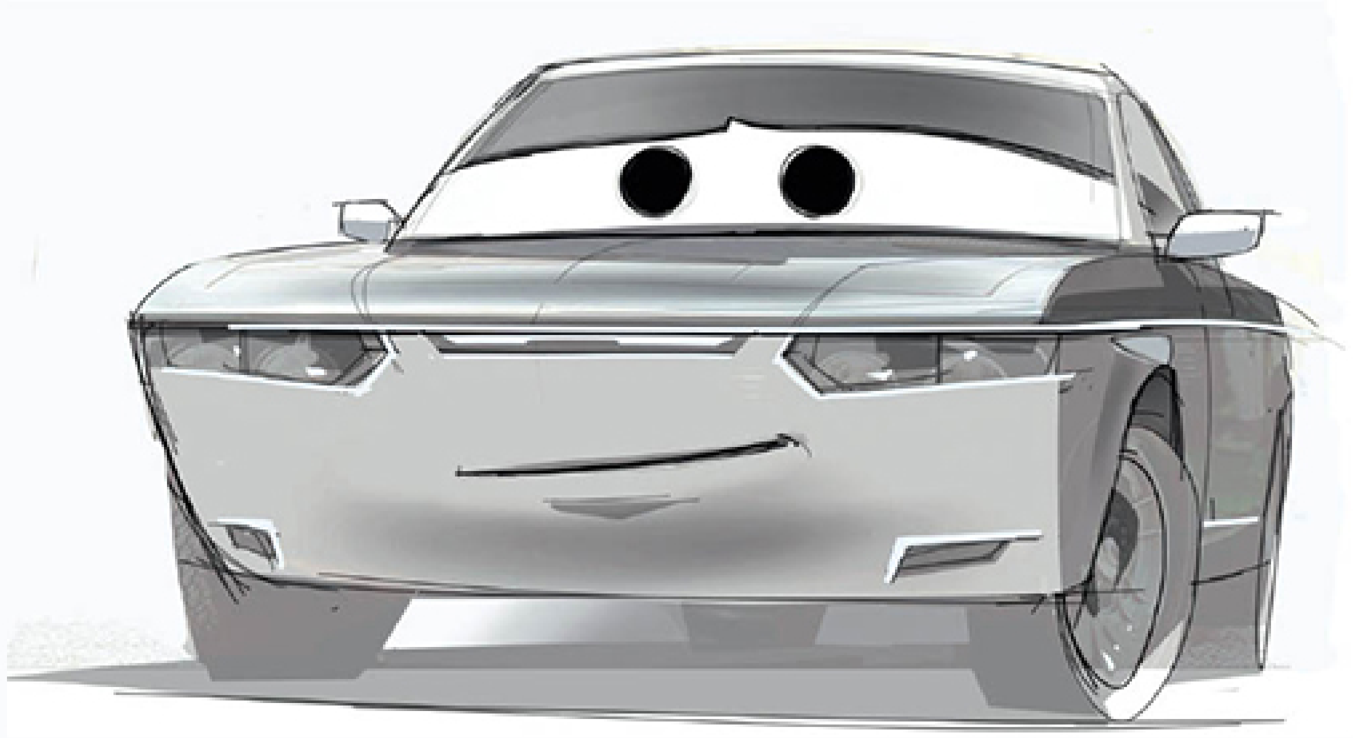
(top) **KYLE MACNAUGHTON** Digital; (bottom) **GARRETT TAYLOR** Digital; (right) **KYLE MACNAUGHTON** Digital

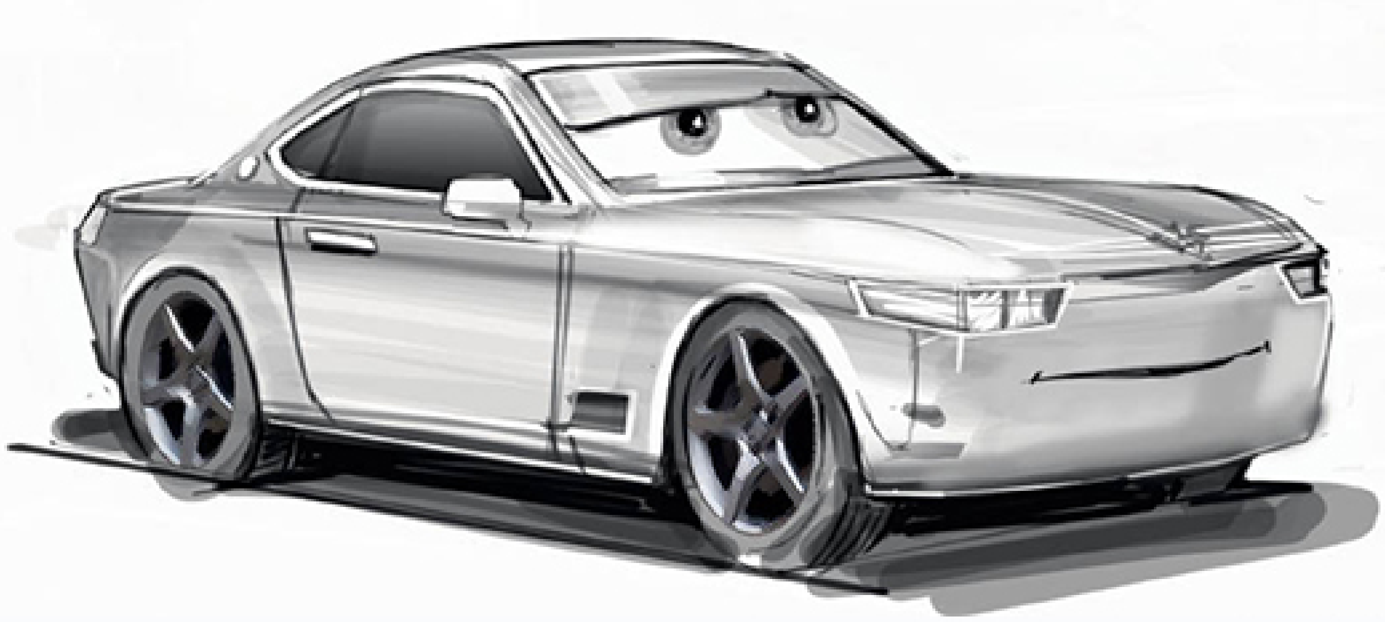


STERLING DUNN

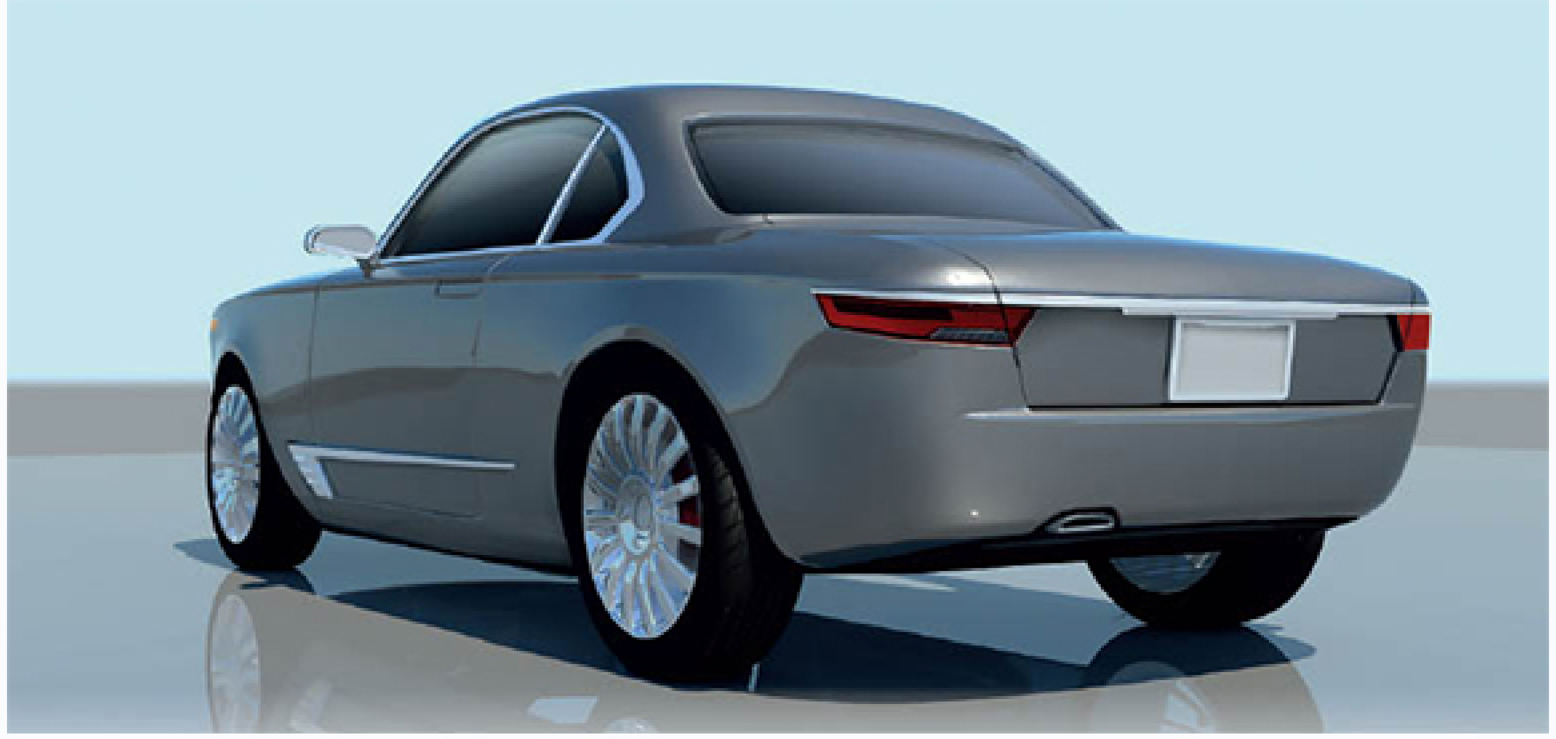


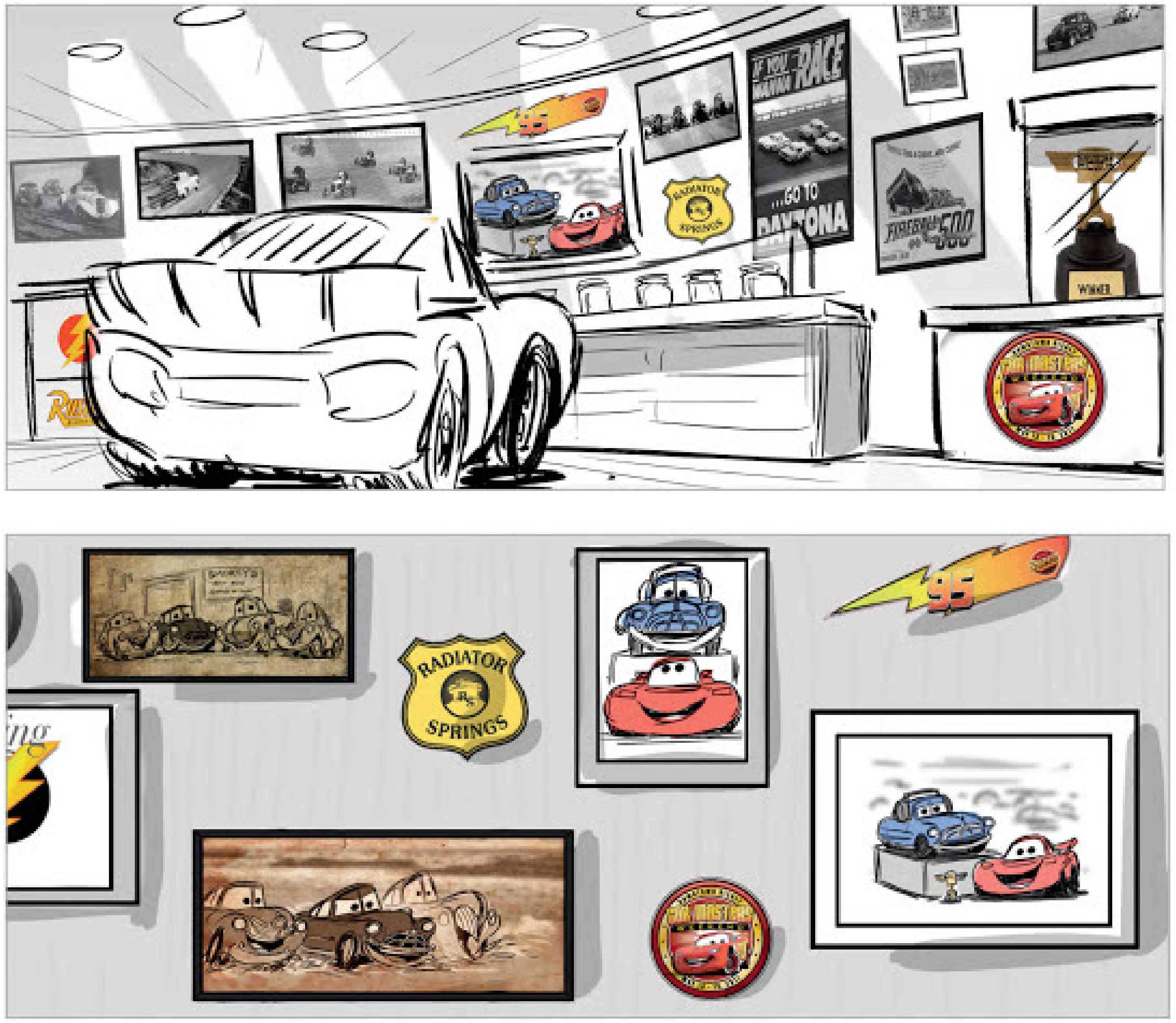


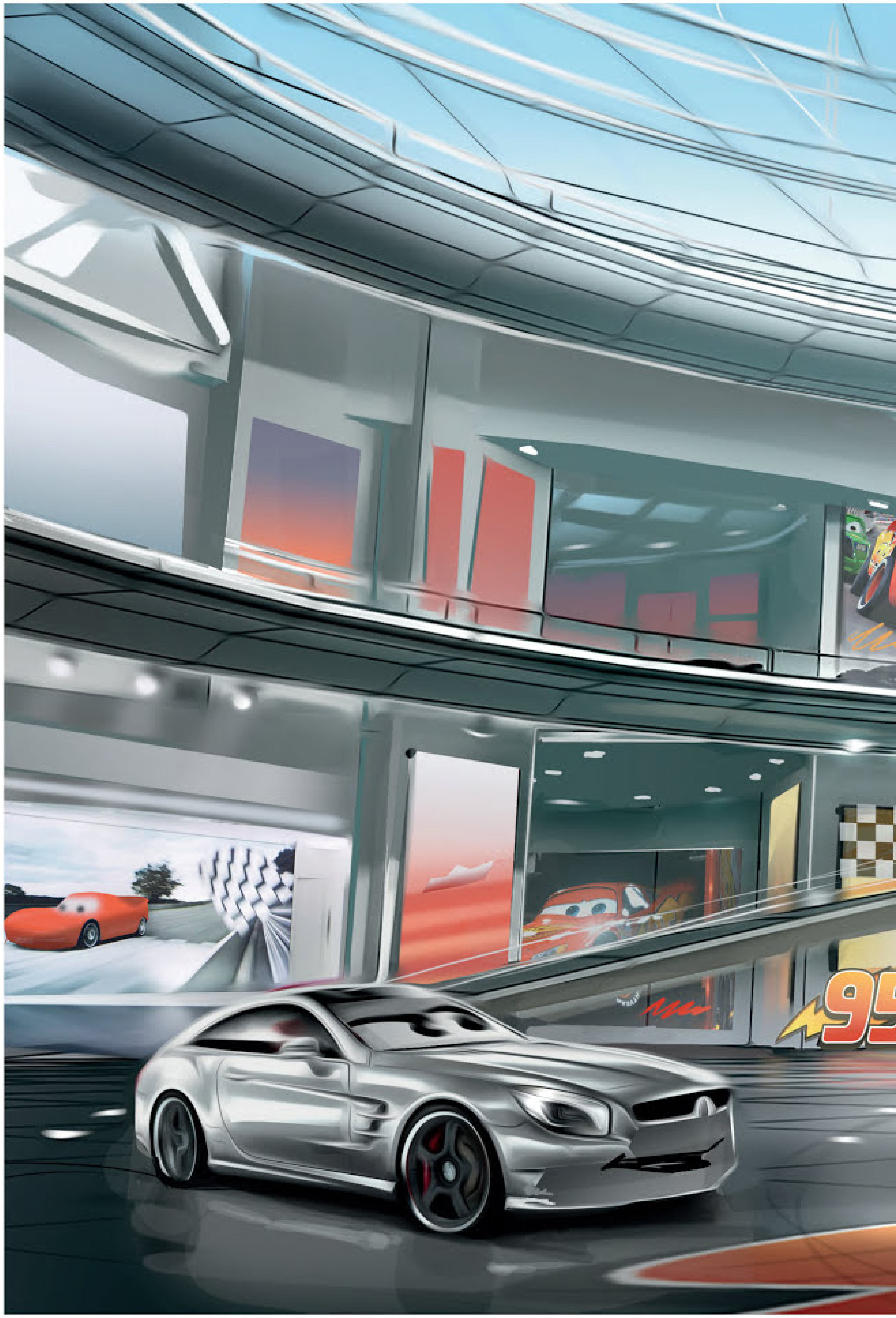




(top) **J Mays** Digital; (middle left) **JAY SHUSTER** Digital; (middle right) **GARRETT TAYLOR** Digital
(bottom) Design by **GARRETT TAYLOR**, Model by **ANDREW SCHMIDT**
(opposite) **GARRETT TAYLOR** Digital



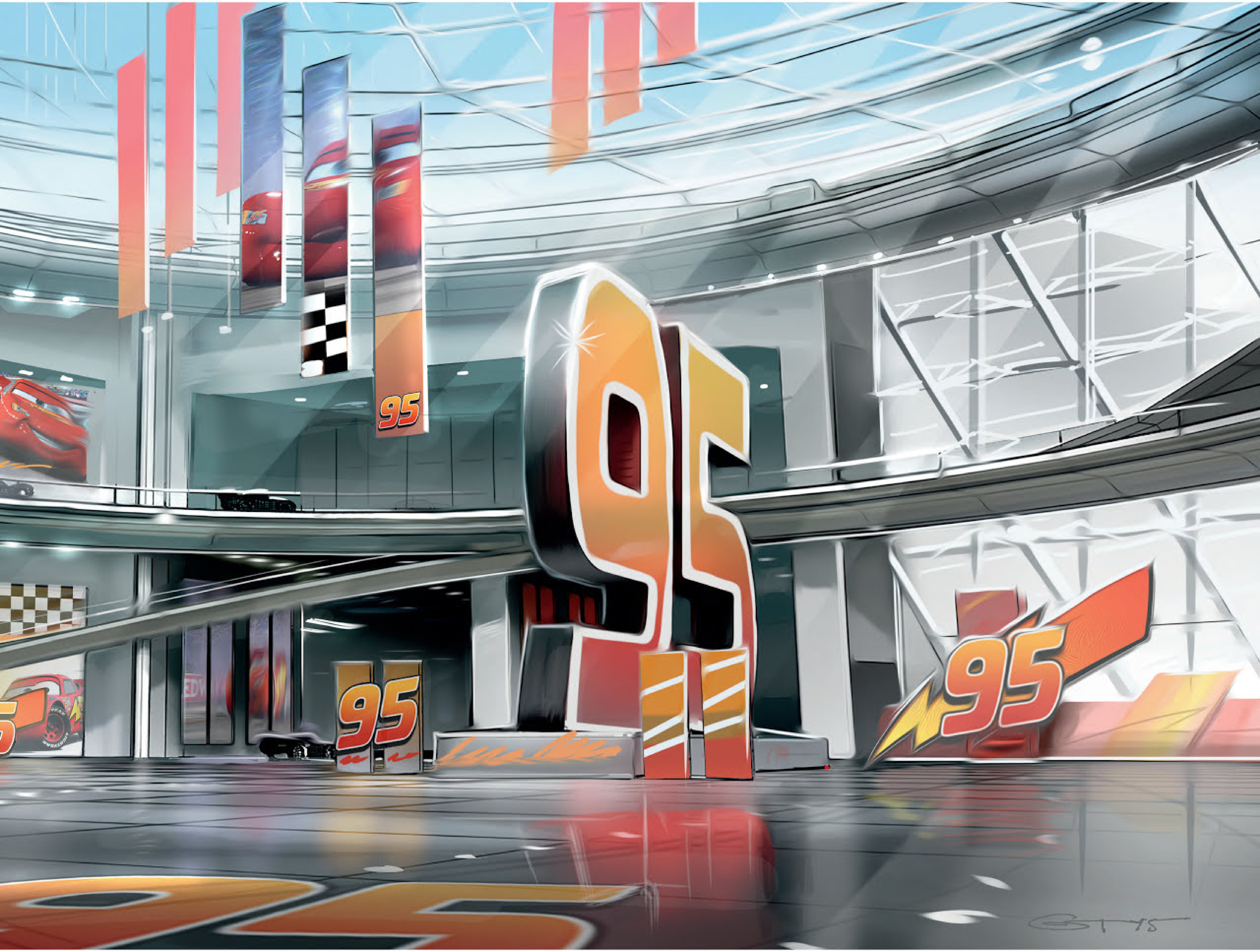




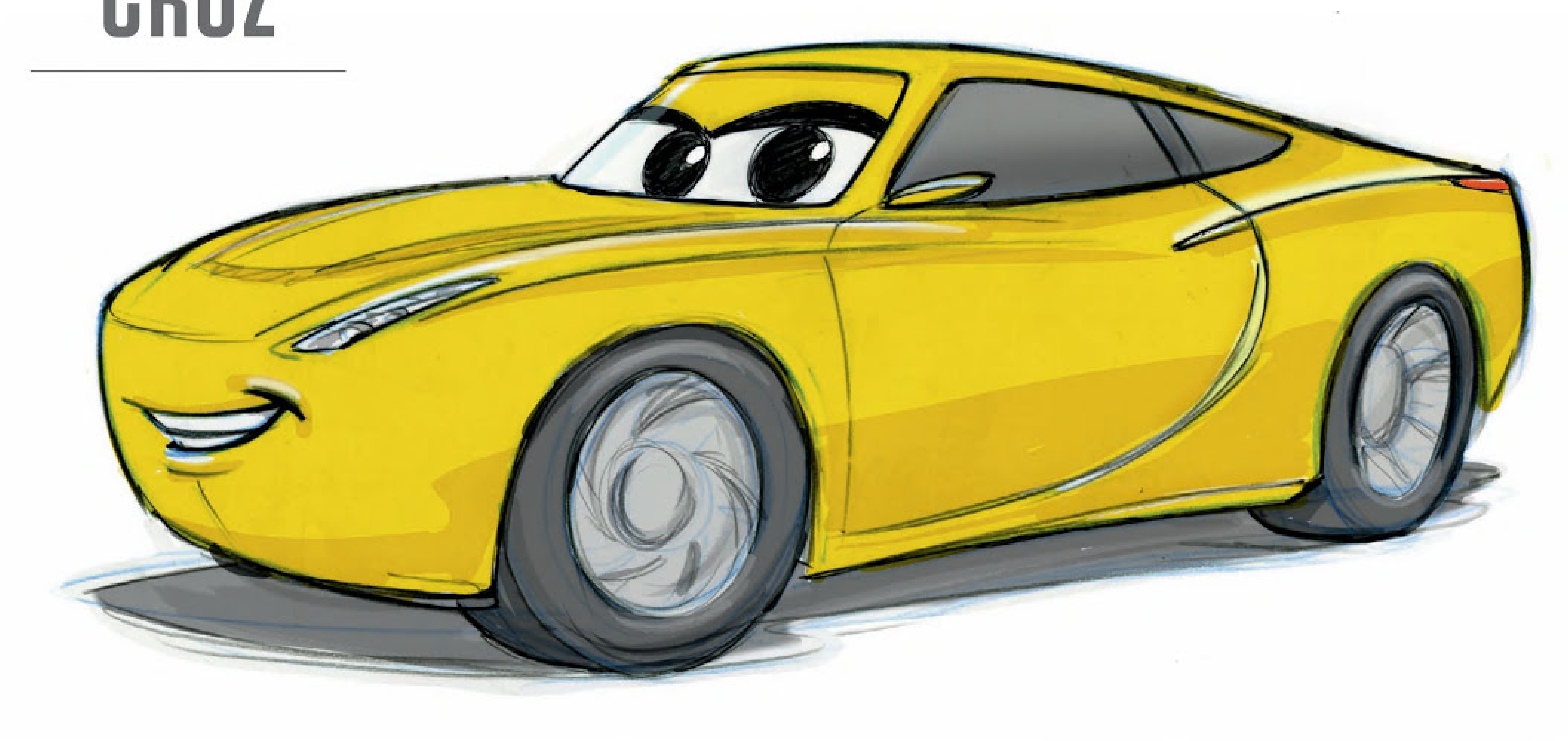
REJ BOURDAGES & TONY ROSENAST Storyboards; (right) GARRET TAYLOR Digital

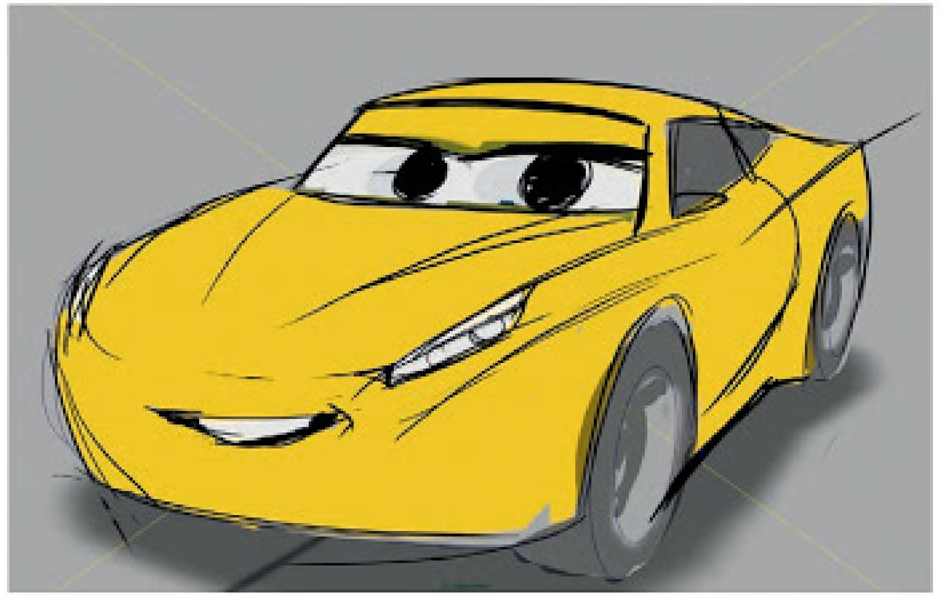
Going into the training center needed to work on two levels. First, it needed to be an impressive monument to Lightning McQueen as a racing superstar, with trophies, banners, and memorabilia greeting us as we entered. Second, the training center needed to connect personally with Lightning as a more intimate collection of momentos curated by a real fan: Sterling. I love that there is an emotional collection of intimate souvenirs and personal moments highlighting McQueen's rise through the racing world. There is little we "know," as an audience, of Lightning's past. This scene enabled us to catch a glimpse of McQueen's beginnings and rise to fame.

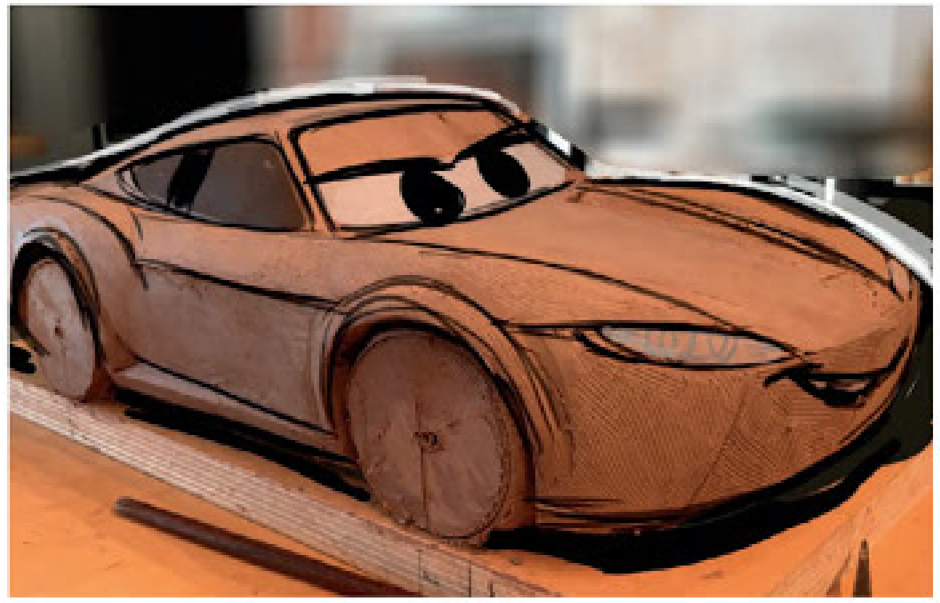
—**REJ BOURDAGES**, Story Artist

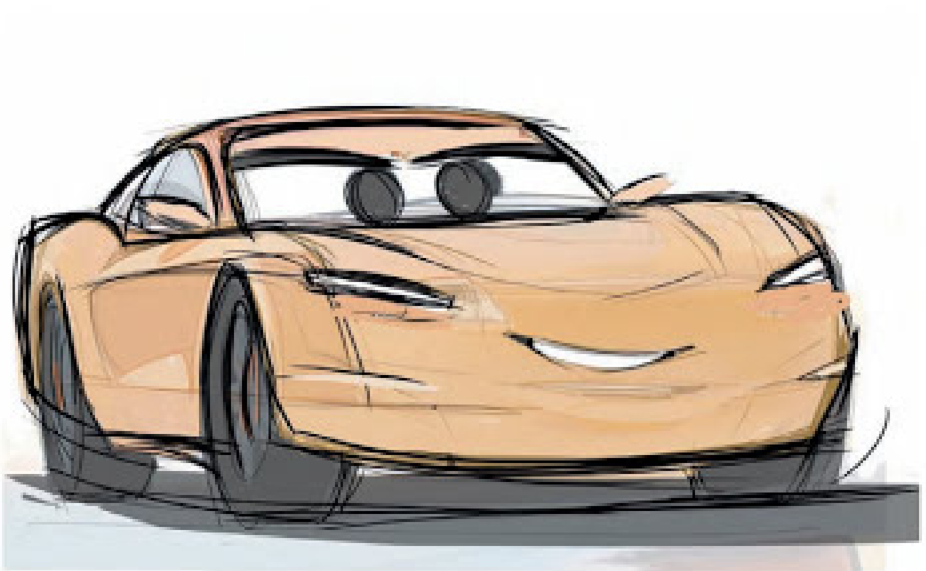

95
95
95
95
95
95

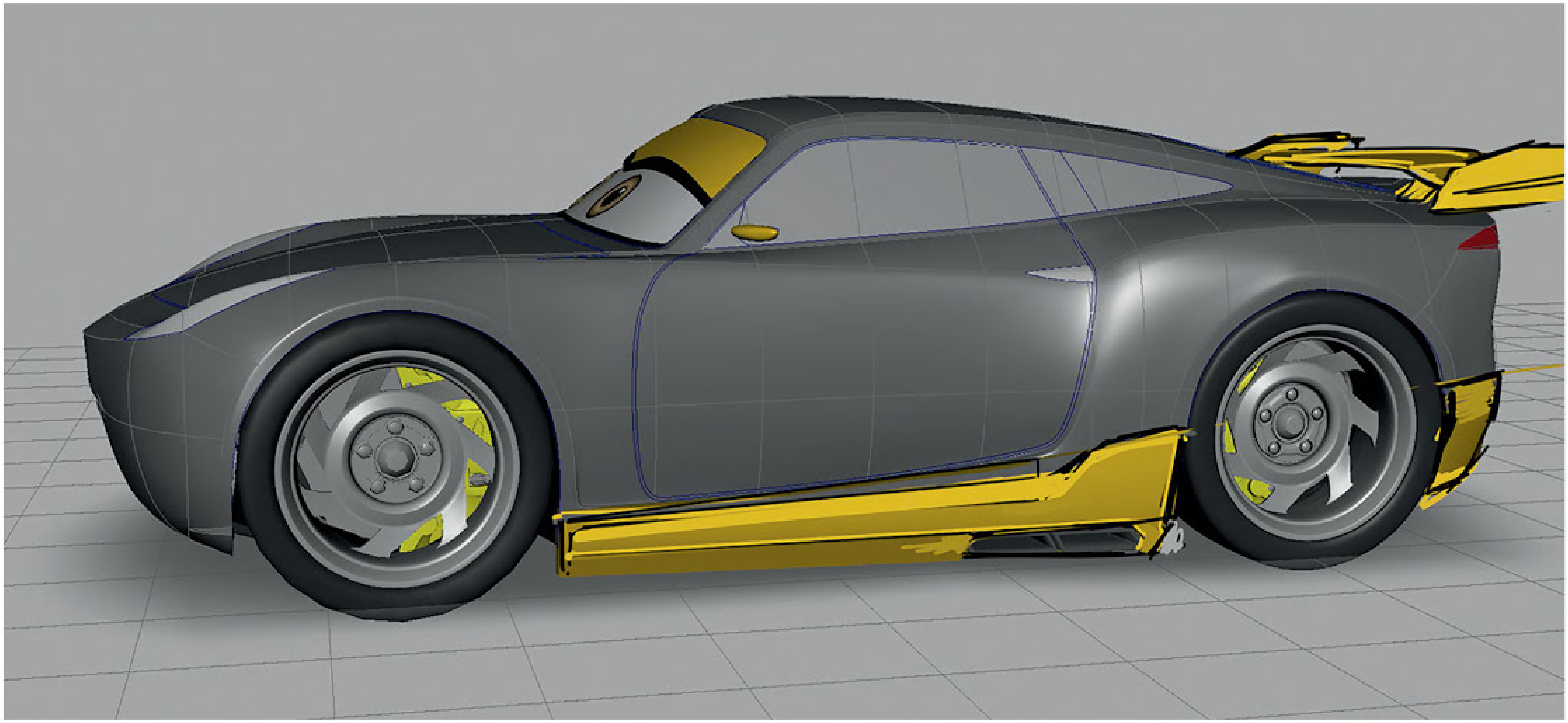
CRUZ

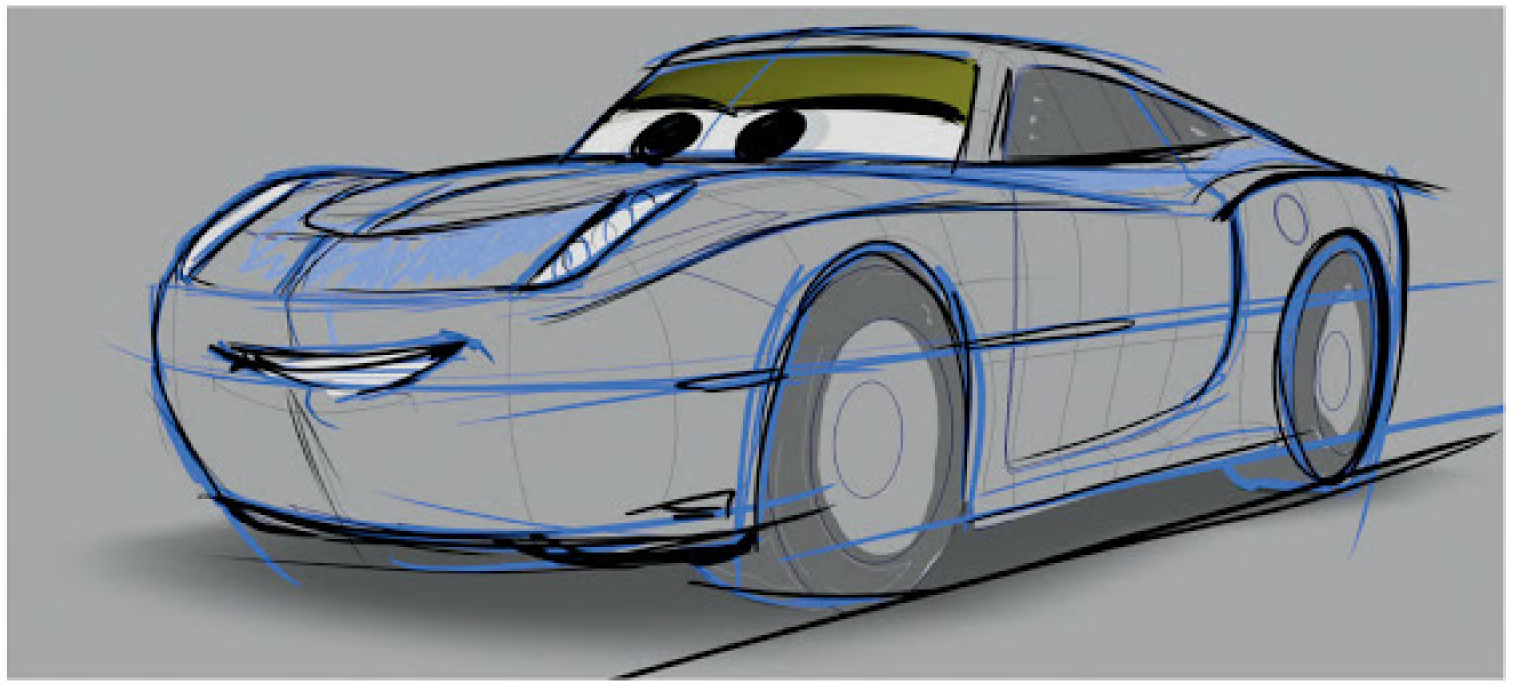












We had a tricky task in developing Cruz. While we knew we needed the character to be charming, entertaining, and quirky, we were also wary of how she could steal McQueen's thunder. Supporting characters need to "support" the main character, so we put a keen eye to having Cruz contrast against McQueen in ways that would help shine a light on McQueen's goals and stakes in the story. She wears a "mask" of over-exuberance as a personal trainer, but that mask covers the insecurities she hides inside—insecurities that serve as a layer of McQueen's story.

—**SCOTT MORSE**, Story Supervisor

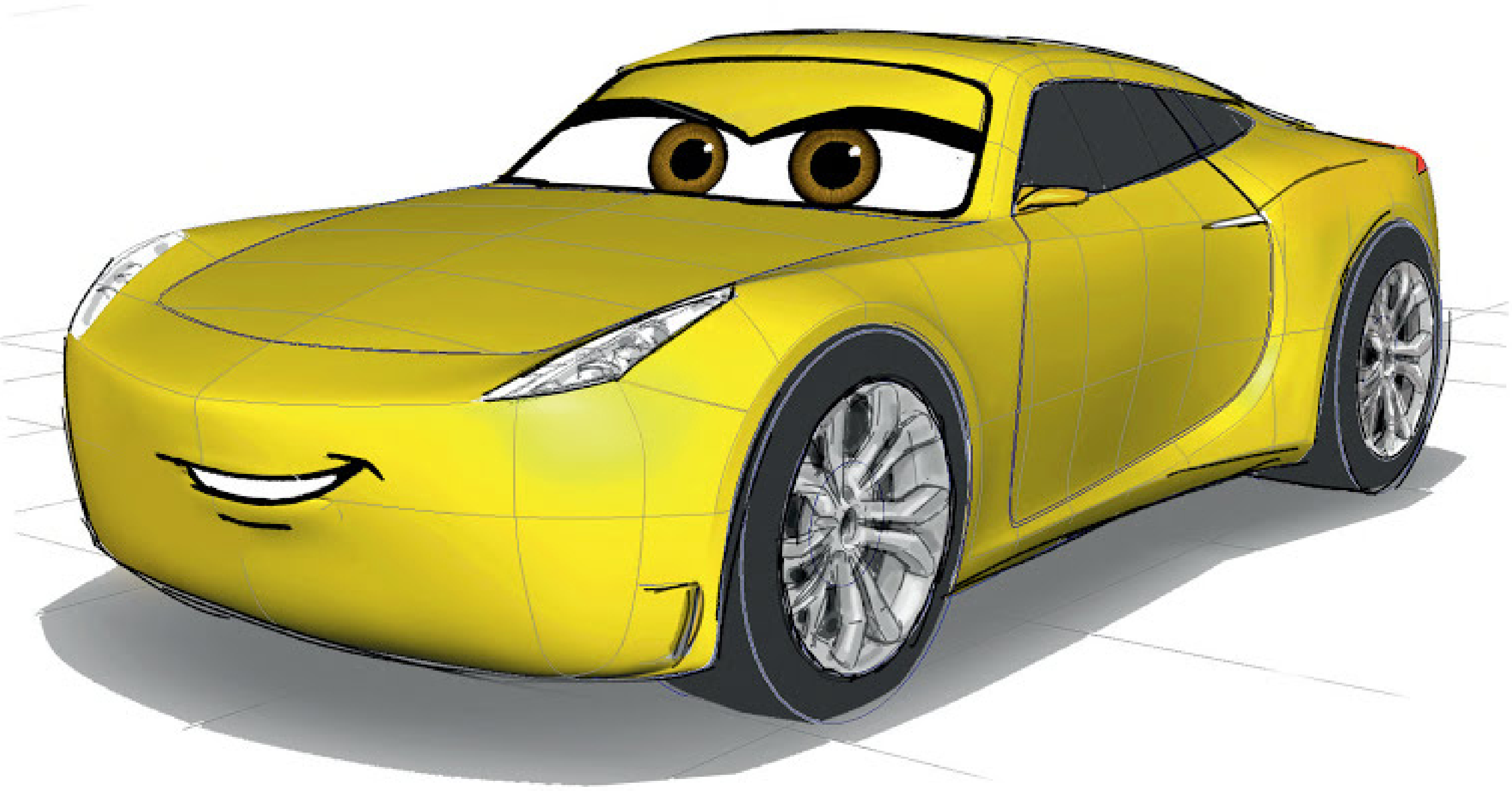
Design by **BOB PAULEY**, Model by **ANDREW SCHMIDT**;
(opposite top) **BOB PAULEY** Digital; (opposite bottom left) Design by **BOB PAULEY**, Model by **ANDREW SCHMIDT**; (opposite bottom center) Design by **BOB PAULEY**, Sculpt by **JEROME RANFT**; (opposite bottom right) **BOB PAULEY** Digital

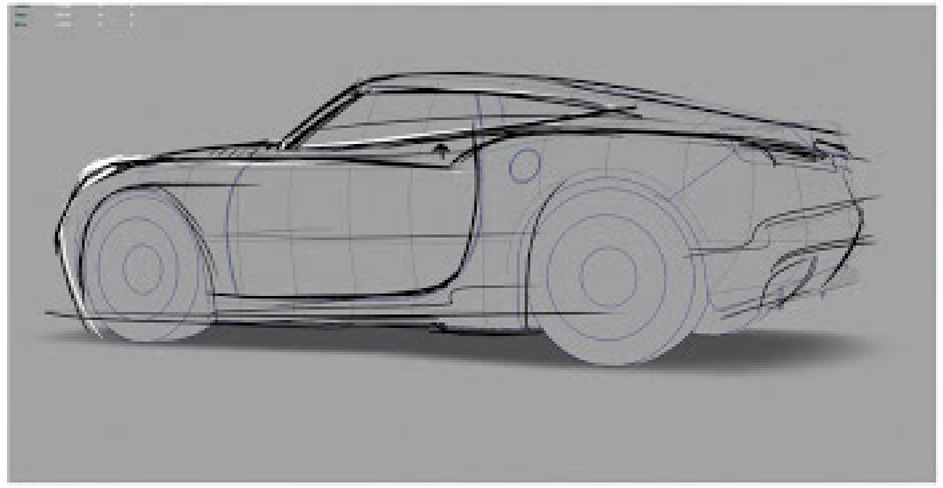
Cruz's design process spanned the length of the project. Her design was in full swing as her character was still evolving; she moved forward in art as story was figuring out who she was. It was like a race, her design and nature were both merging into who she is. We knew she was a young, modern, domestic performance car, strong, and fast looking, and it had to be believable that she could race with McQueen, Storm, and the Next-Gen Piston Cup racers. Aiming for a sleek and powerful form with some curves, our goal was a strong, cool-looking character, but not to make it too obvious her desire to race. A fastback design fit the nature of her role and a slight echo of McQueen. The main goal was to be an appealing and believable car design or, in other words, cool enough to share the screen with McQueen. Late in the movie she is outfitted for the race track with the addition of the aero skirts, a wing, racing wheels, and race graphics, all needed to feel right on her and be technically badass.

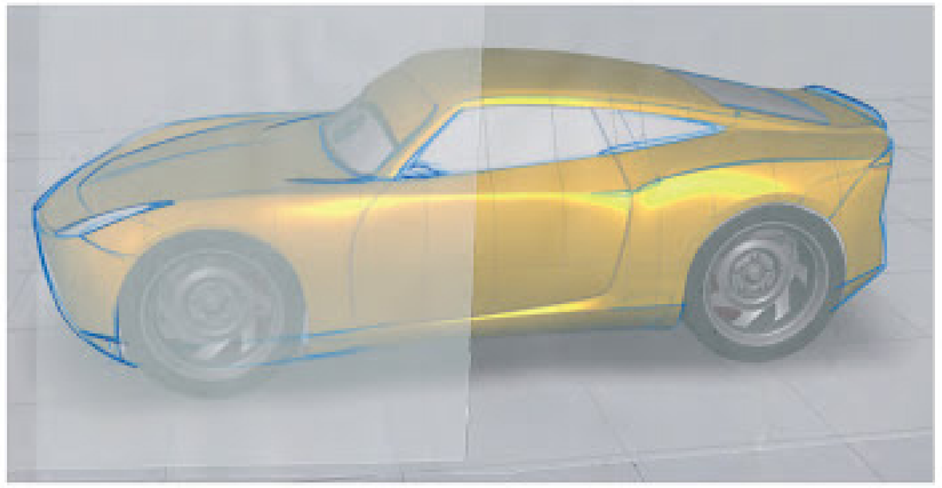
Cruz wasn't designed and built, it was a collaborative, evolving design process, resolved in both clay and on the computer. Even as the design was finished, her character in the film was being tweaked and in turn influenced some additional dialing in of her look.

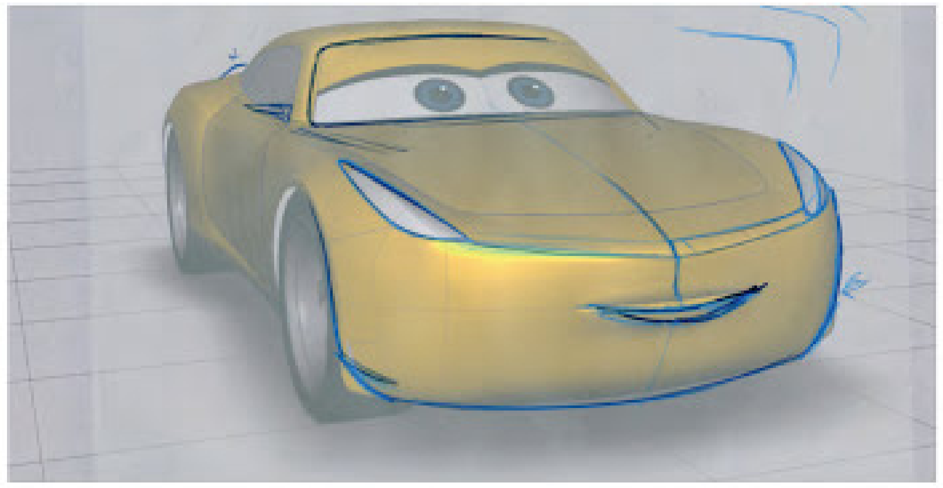
Cruz's design was a good challenge with a fun team. Some designs are adventures: You can get a little lost and unsure where you are going. There is no map, so you just have to have faith in the process, trust everyone and keep rolling forward. Just like driving on a big trip, occasionally you are not aware where you are, but then you see the signs that you're on track and you pick up speed and the ride gets fun again. Cruz was like a big road trip.

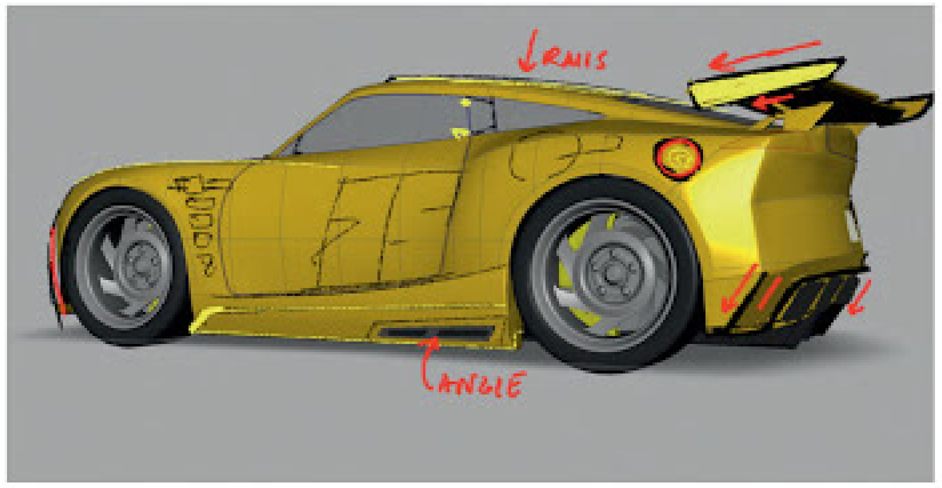
—**BOB PAULEY,** Additional Character Art Direction

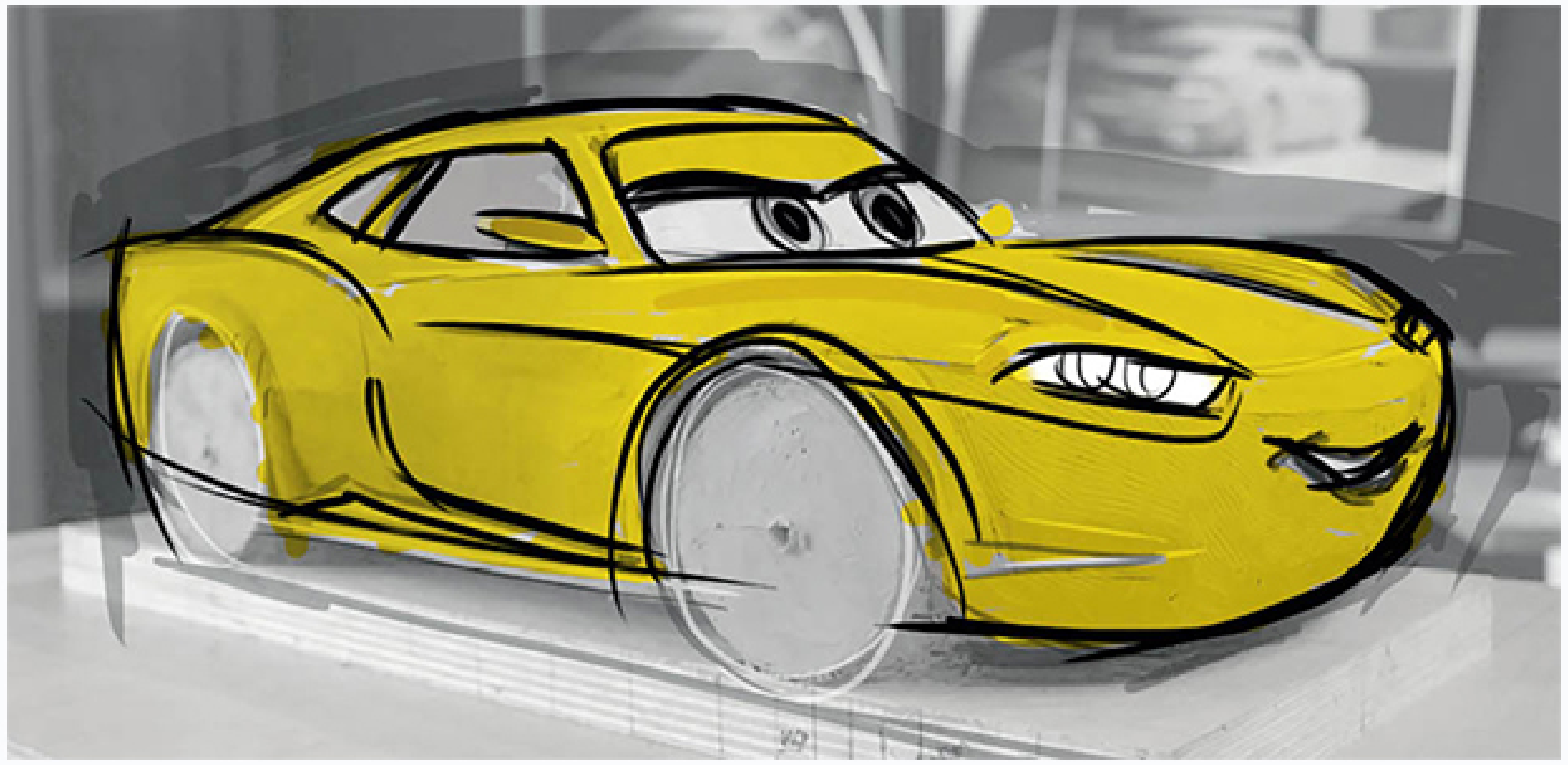


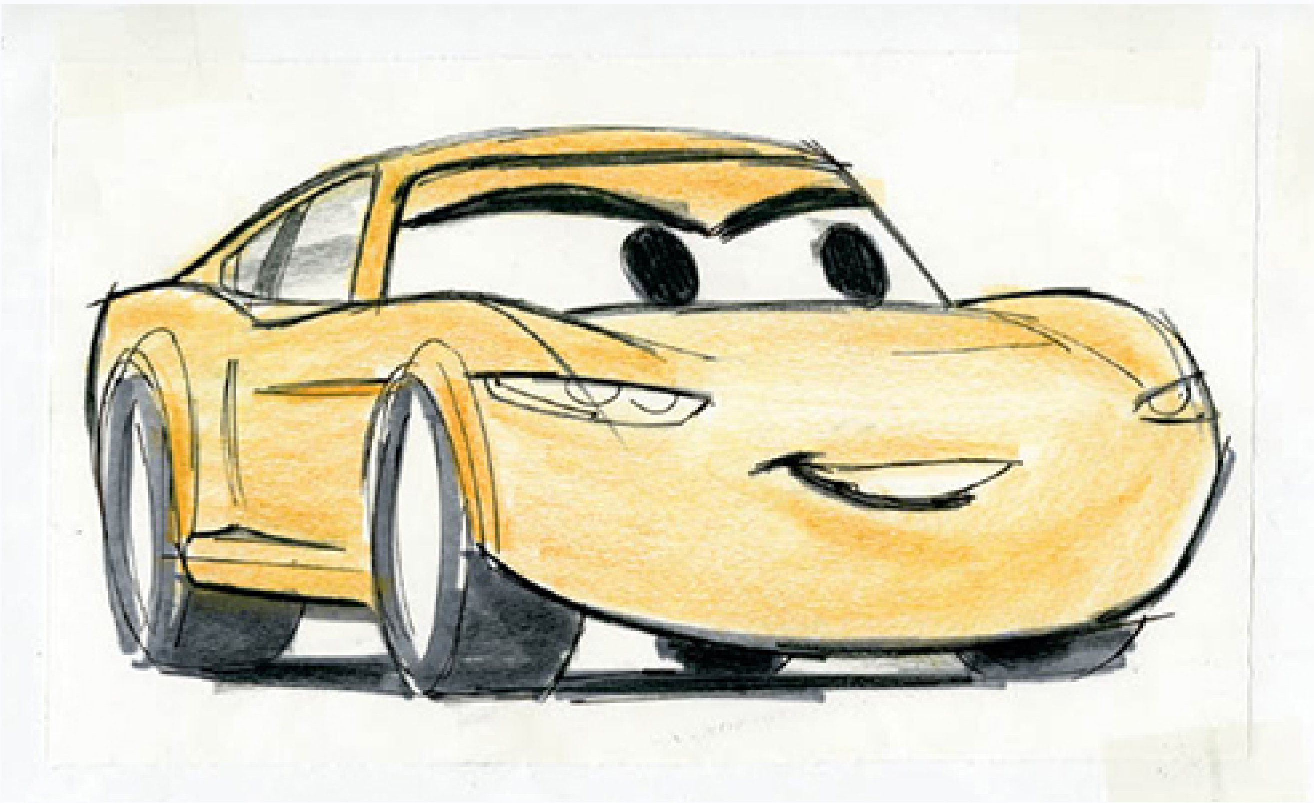


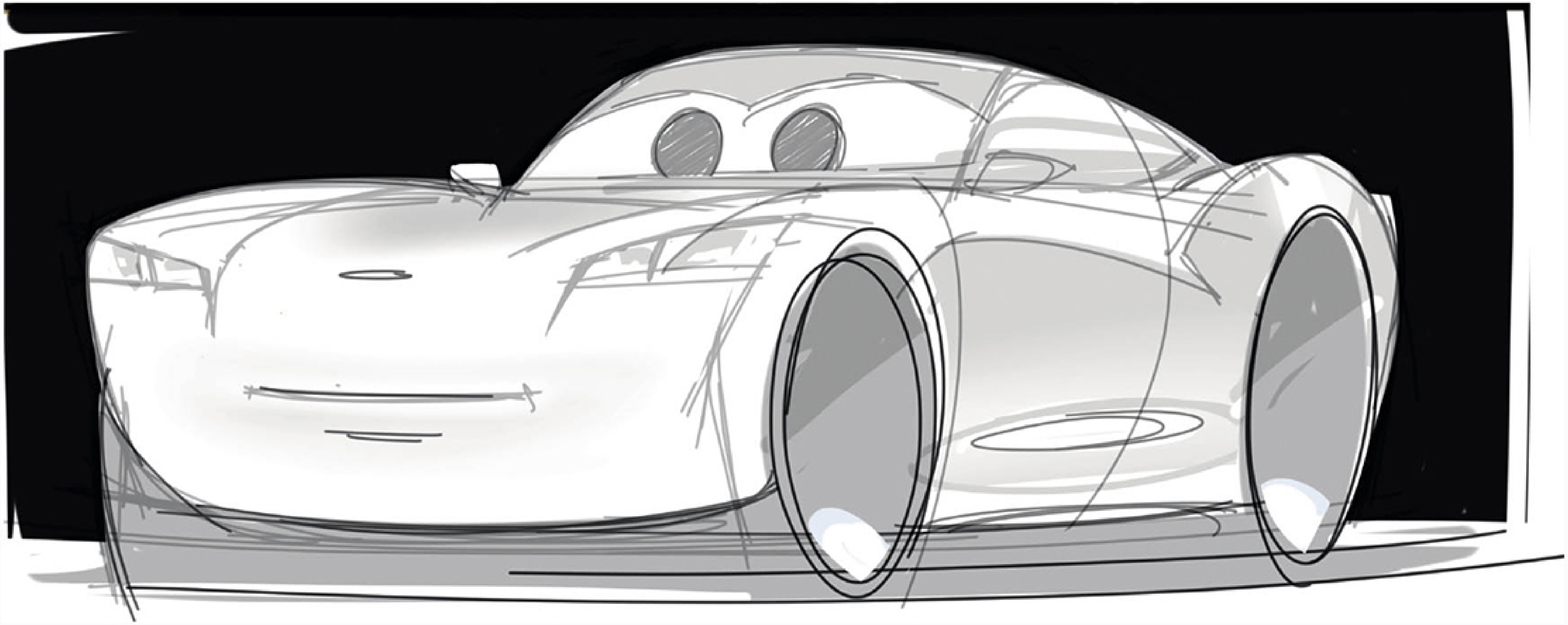




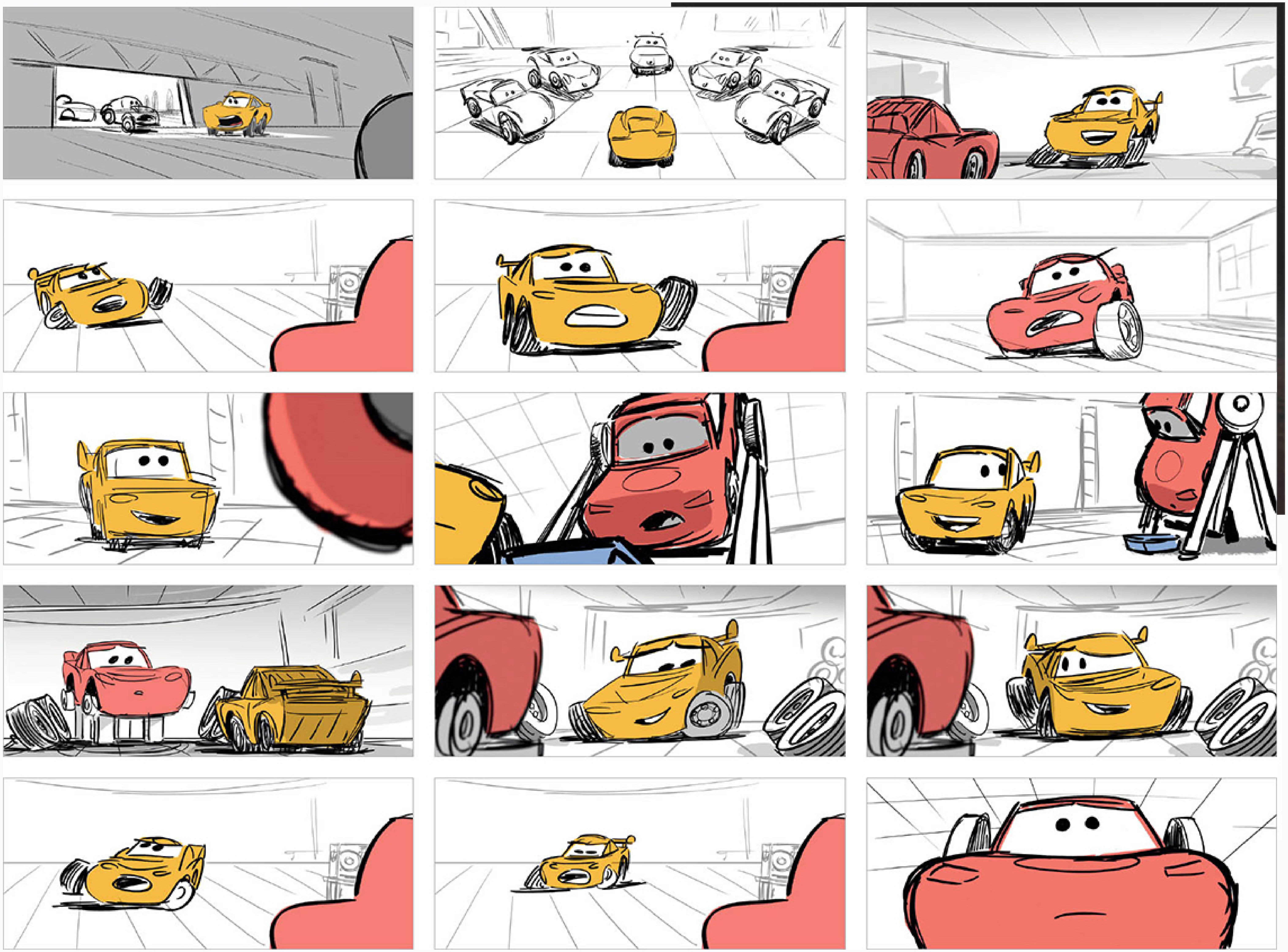




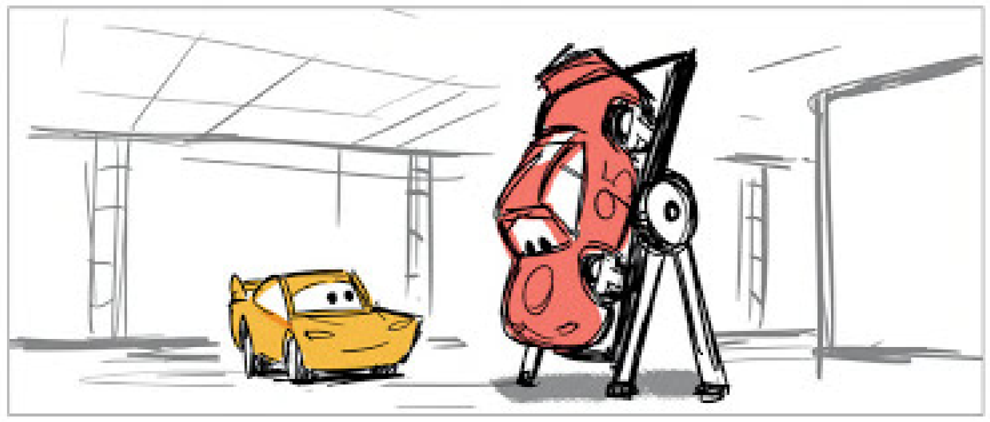


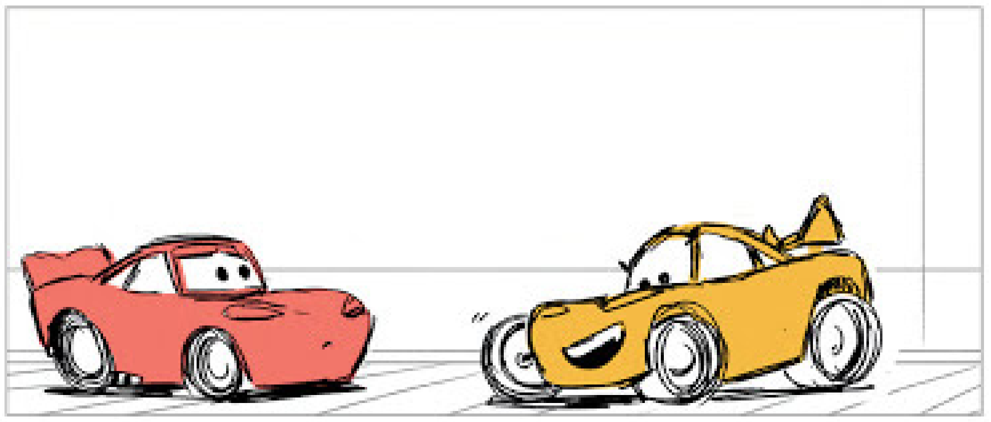


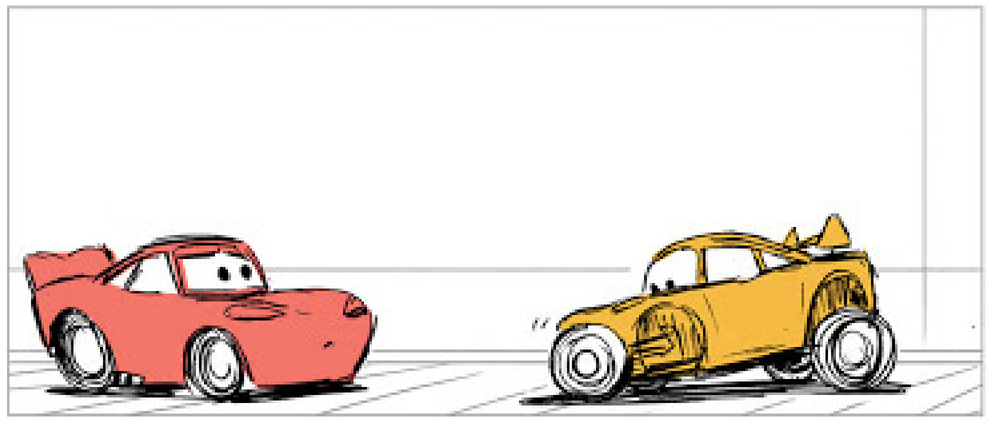
(top left) Design by **BOB PAULEY,** Sculpt by **JEROME RANET;** (top right) **BOB PAULEY** Pencil; (bottom) **JAY SHUSTER** Digital;
(opposite) Design by **BOB PAULEY,** Model by **ANDREW SCHMIDT**

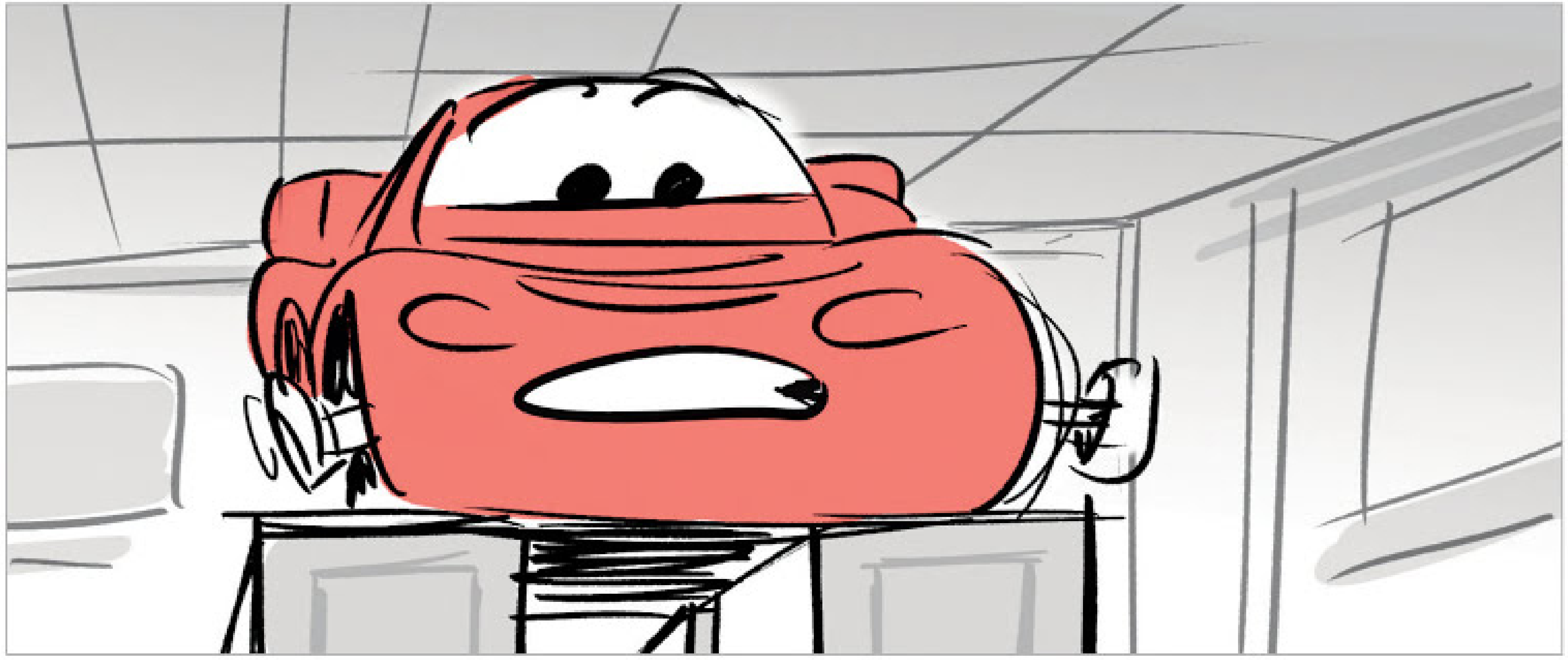


JP VINE, REJ BOURDAGES, CHRISTIAN ROMAN Storyboards, (opposite) **JP VINE, REJ BOURDAGES, MICHAEL YATES, CHRISTIAN ROMAN** Storyboards





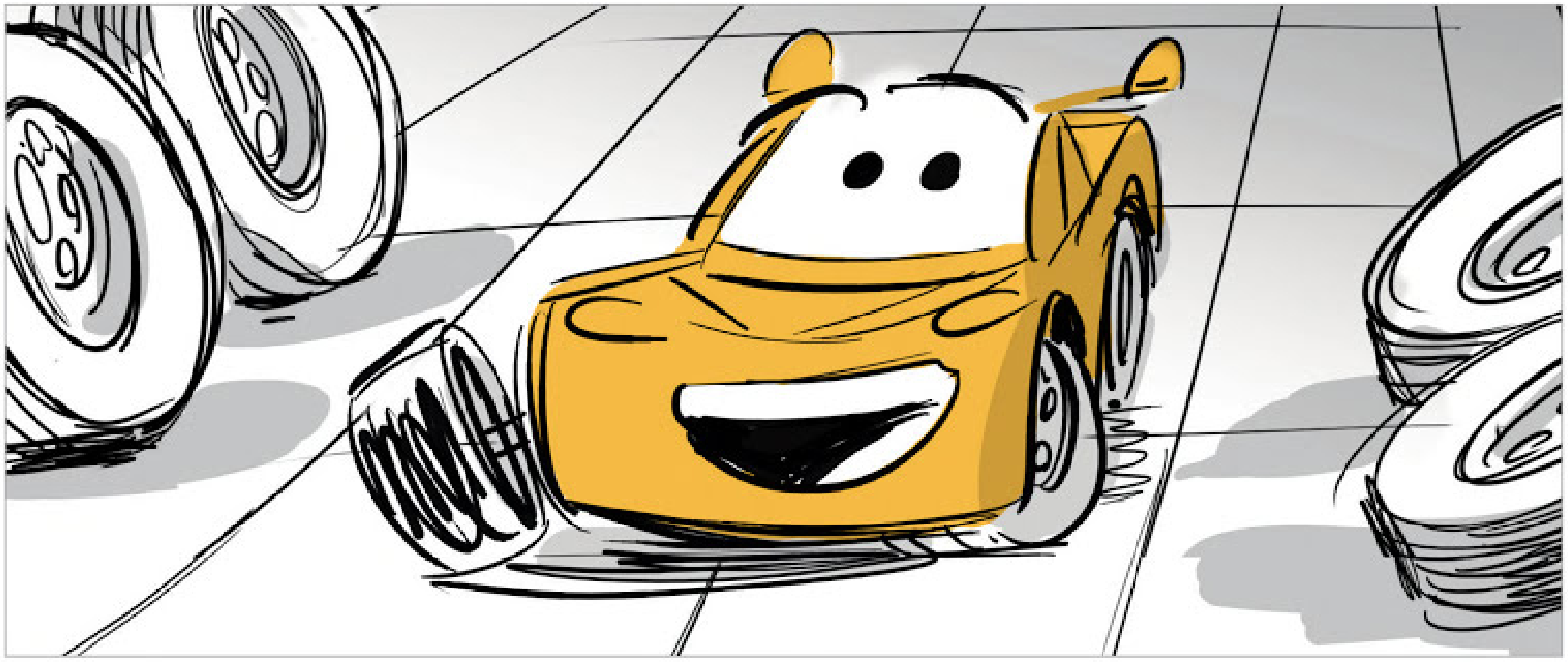


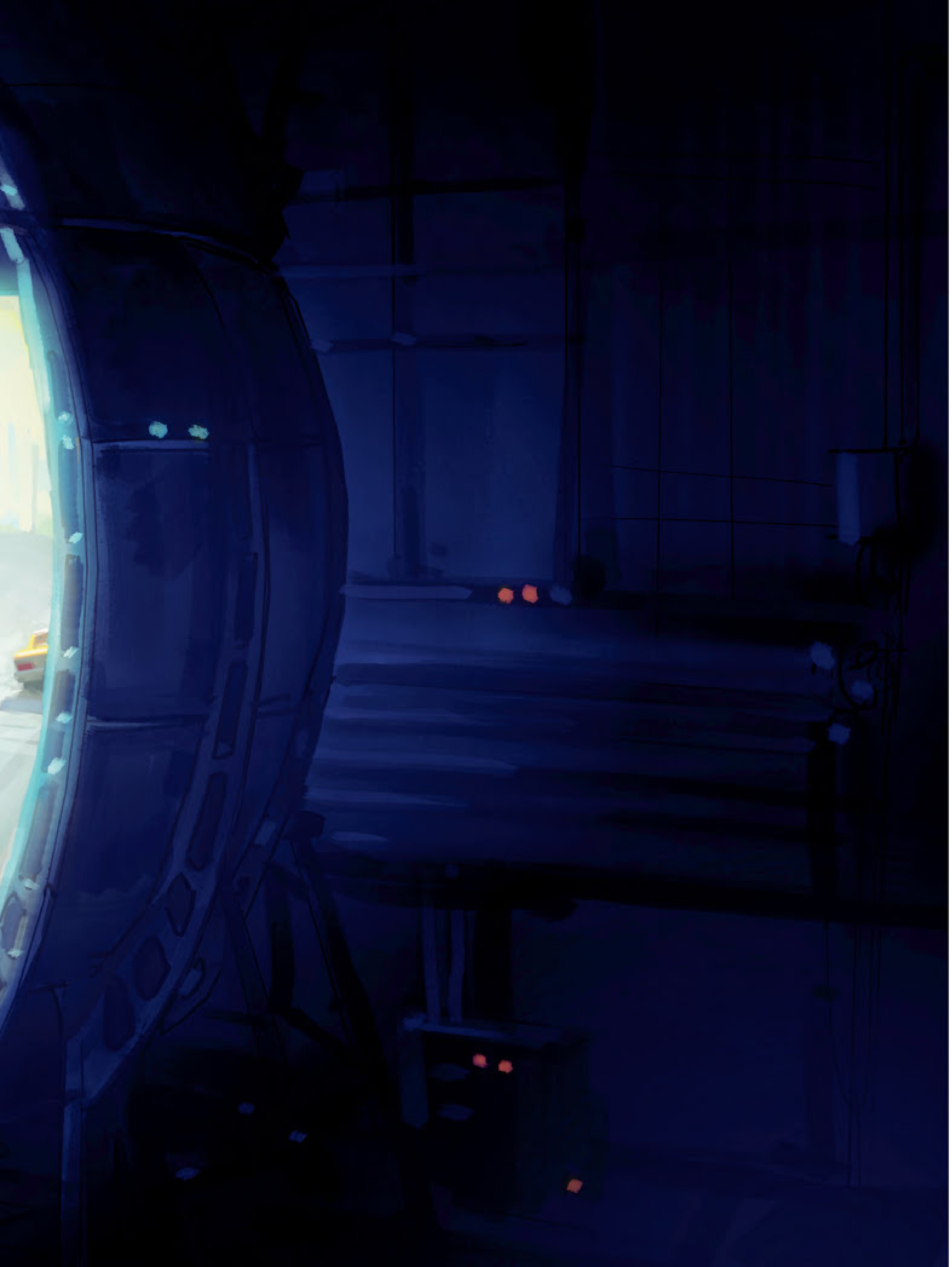


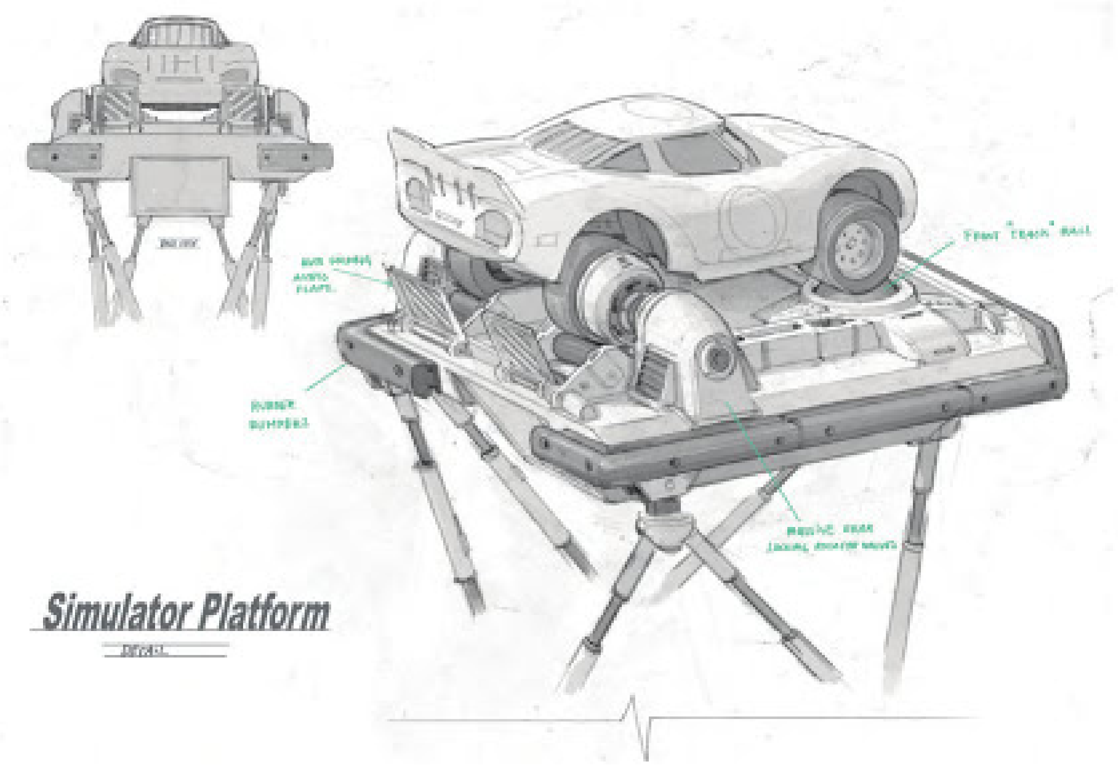
MEETING CRUZ

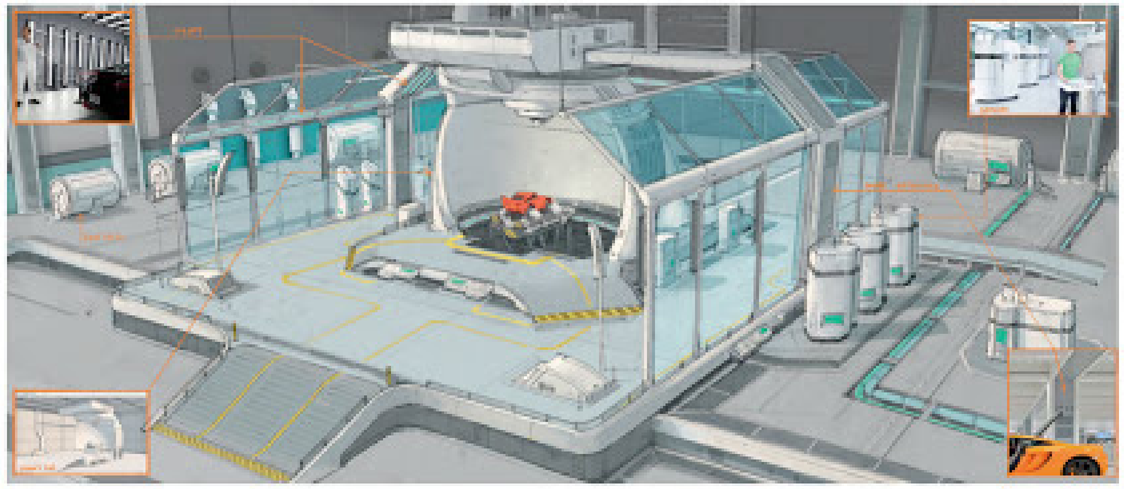
We usually explore many roads when we're developing our characters (pun in Cruz was no exception). For a brief period she was even a different gender. Initially, Cruz was a fellow race car, who McQueen meets at Sterling's racing facility. She was young, cocky, headstrong—a very fast racer, not unlike McQueen was in the first *Cars* movie. We thought it would be interesting to pair McQueen off with a younger version of himself, allowing him to play into the frustration that Doc Hudson felt dealing with a brash, confident, and headstrong character. We soon found that this version of Cruz got in the way of a comeback story and was territory we had already done in the first movie. Cruz felt more interesting the more we gave her opposing traits. She slowly evolved into an awkward, unconventional trainer, a perfect foil for McQueen, who secretly has dreams to be a racer, but lacks confidence. We found the more of an odd couple we made them, the more entertainment and conflict we could have with them.

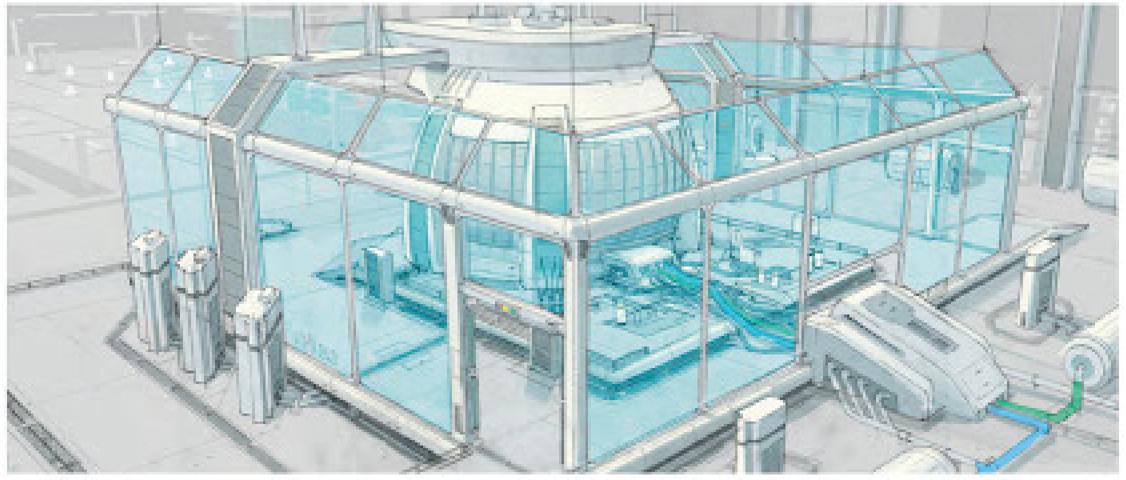
—**REJ BOURDAGES**, Story Artist



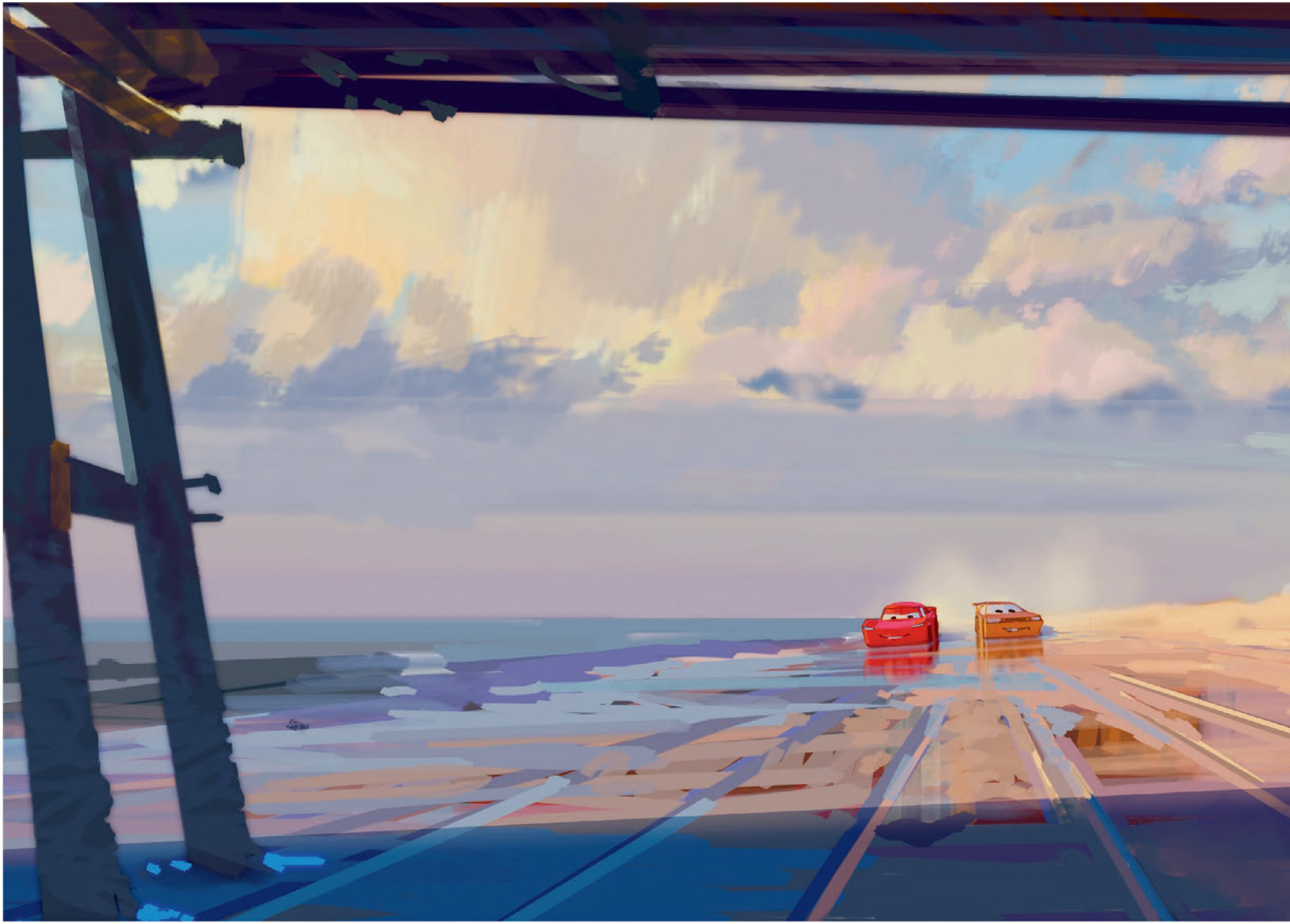


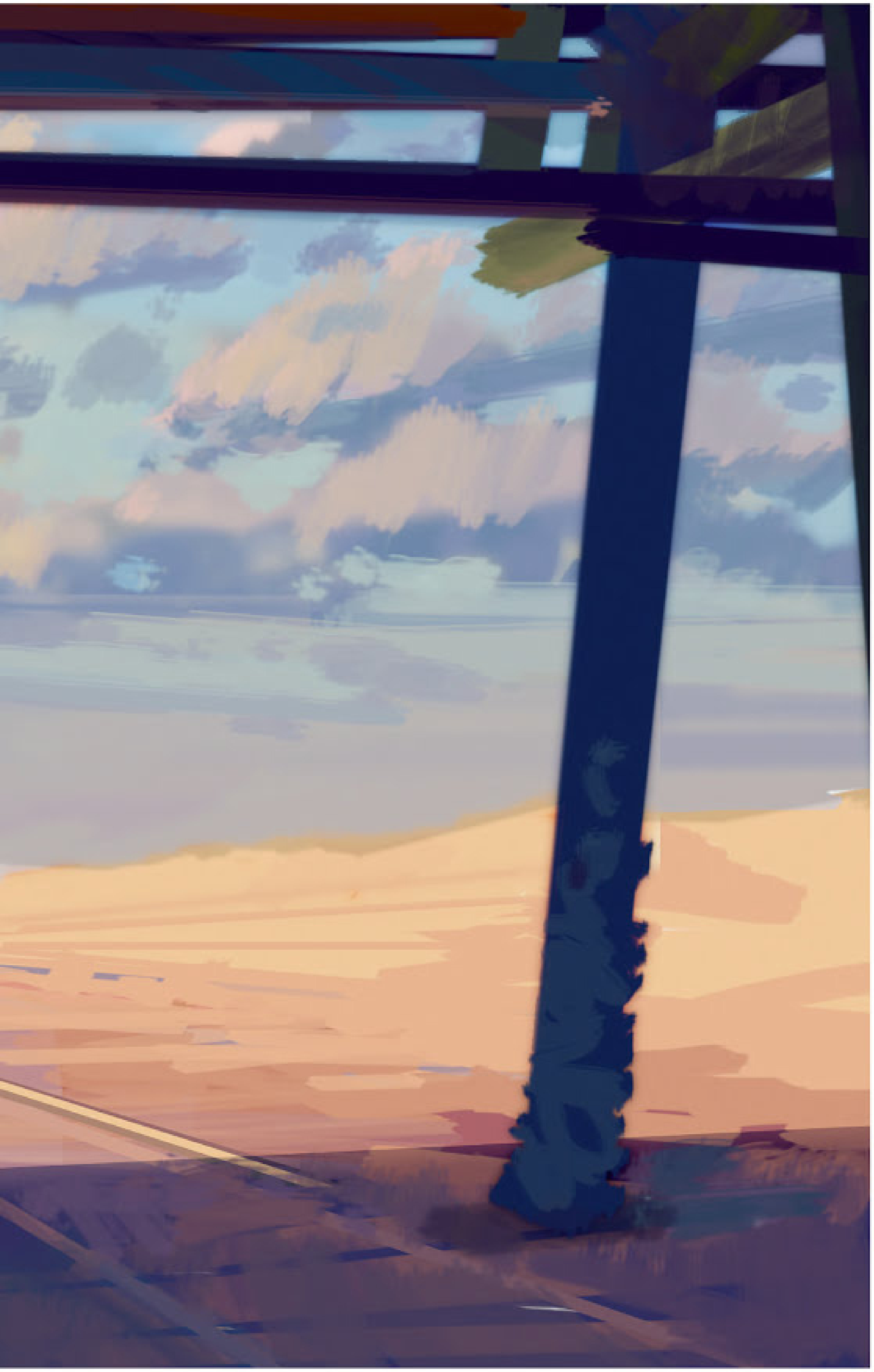

Simulator Platform
DETAIL
RUBBER BUMPERS
FRONT "TRACK" BALL

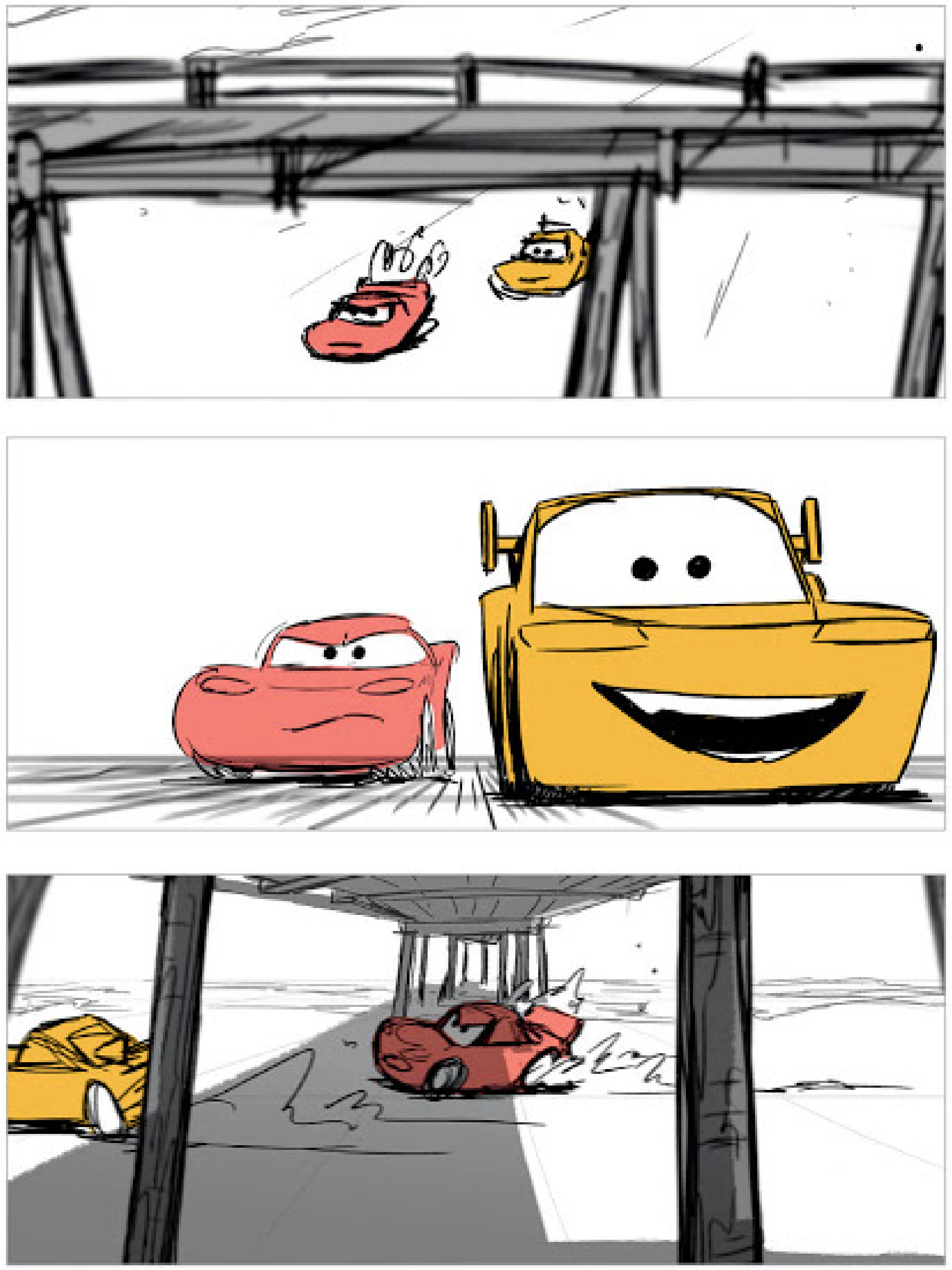




(top) **KRISTIAN NORELIUS**, Digital; (middle and bottom) Design by **KRISTIAN NORELIUS**, Model by **JOSHUA MILLS**; (left) **BILL CONE, GARRETT TAYLOR, NOAH KLOCEK** Digital



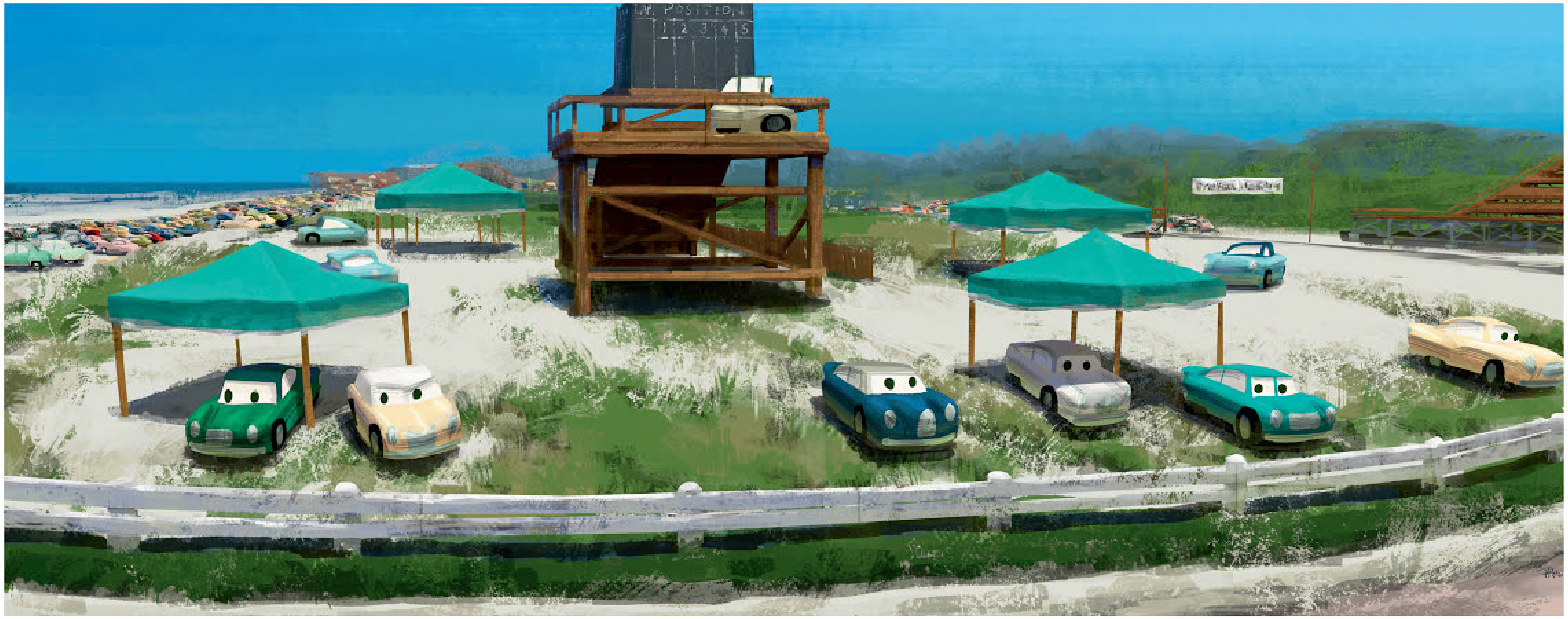


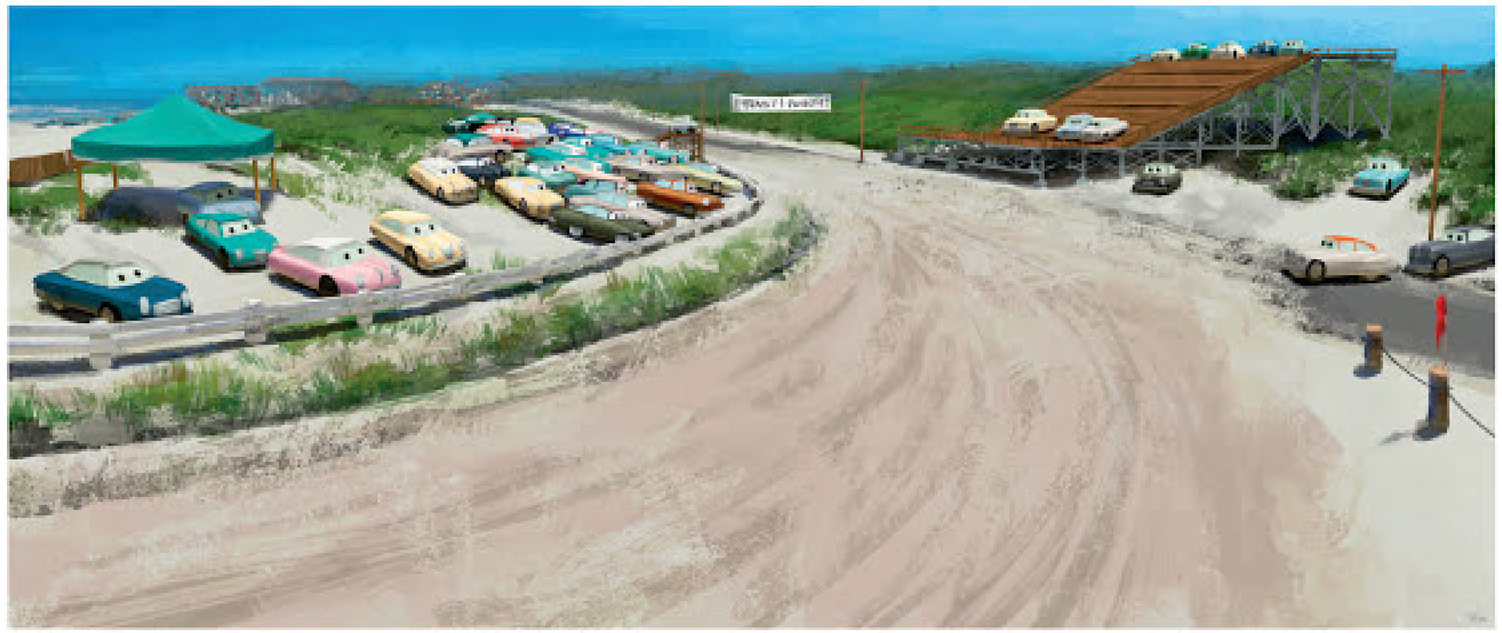


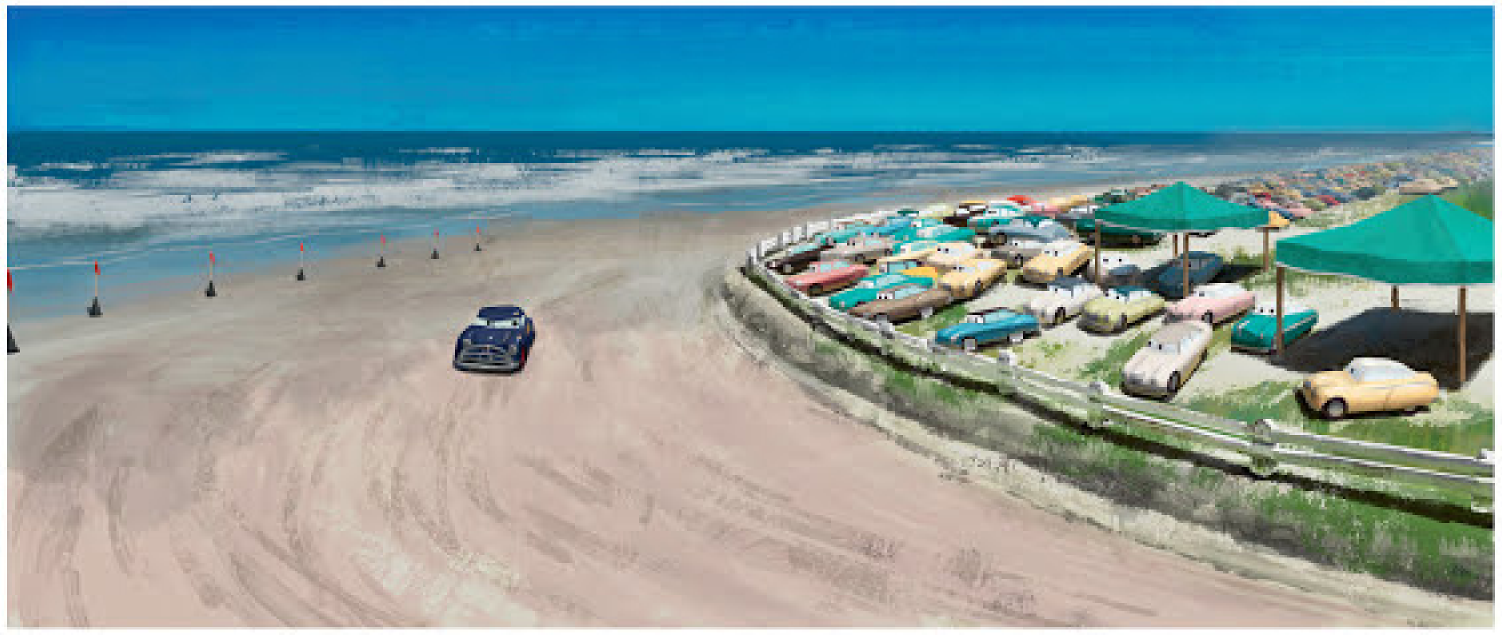
(above) **MICHAEL YATES AND JOHN HOFFMAN** Storyboards; (left) **BILL CONE** Digital

The beach sequence is the first time McQueen and Cruz race one another. It's also the first time we see the characters in a natural environment. The beach set has so much historical significance to the racing world. I wanted to really highlight that in the way the sequence is shot. Lots of wide, expansive shots that emphasize the horizon line and contrast between the compact spaces within the Rust-eze Racing Center. I tried to treat the beach—specifically the bridge—as a passive, but ever-present character that is pressing down on McQueen.

—**MIKE YATES,** Story Artist

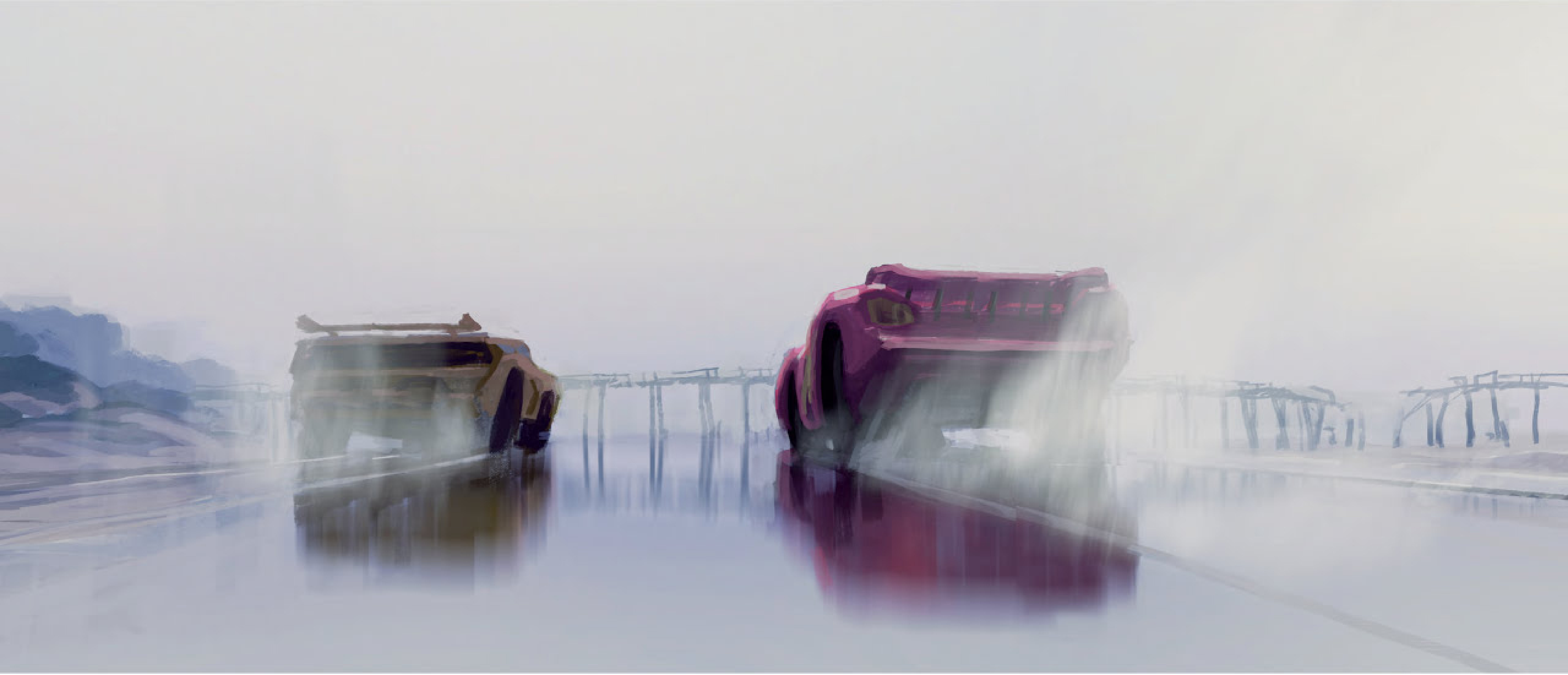


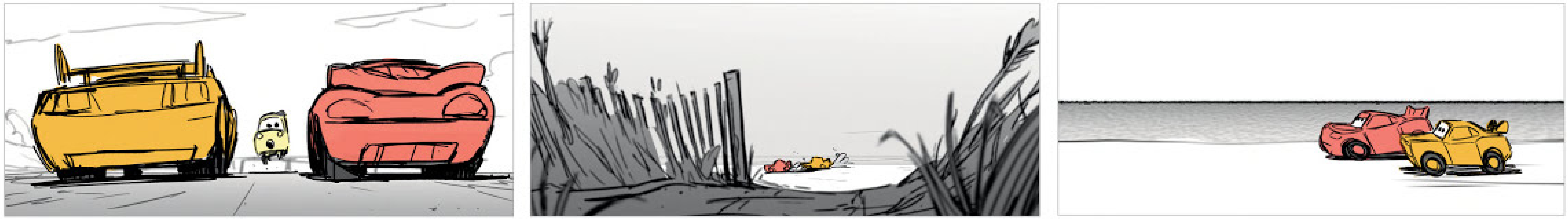




The old footage of Doc racing on the beach establishes a key element of Doc's backstory to the audience, and also relives the early days of the 'beach and road' course in Florida that eventually led to the modern racetrack on the beach that we see in the third act.

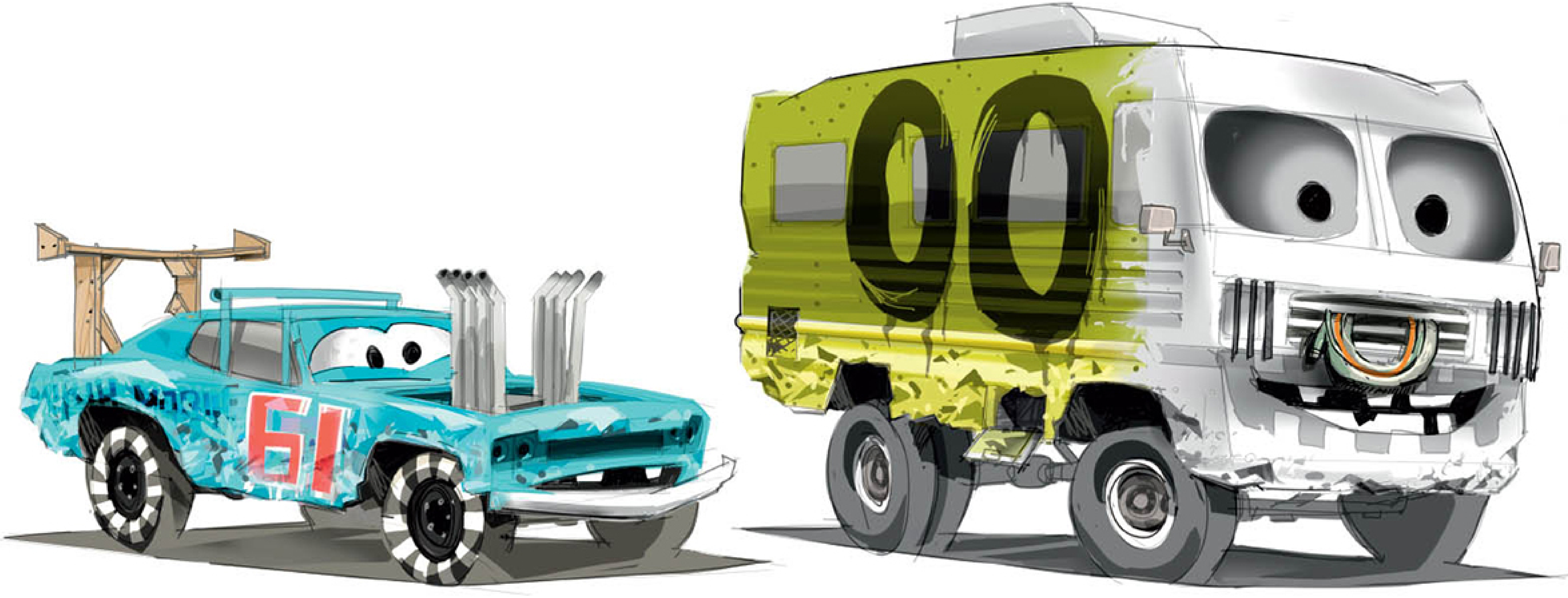
—**BILL CONE**, Production Designer

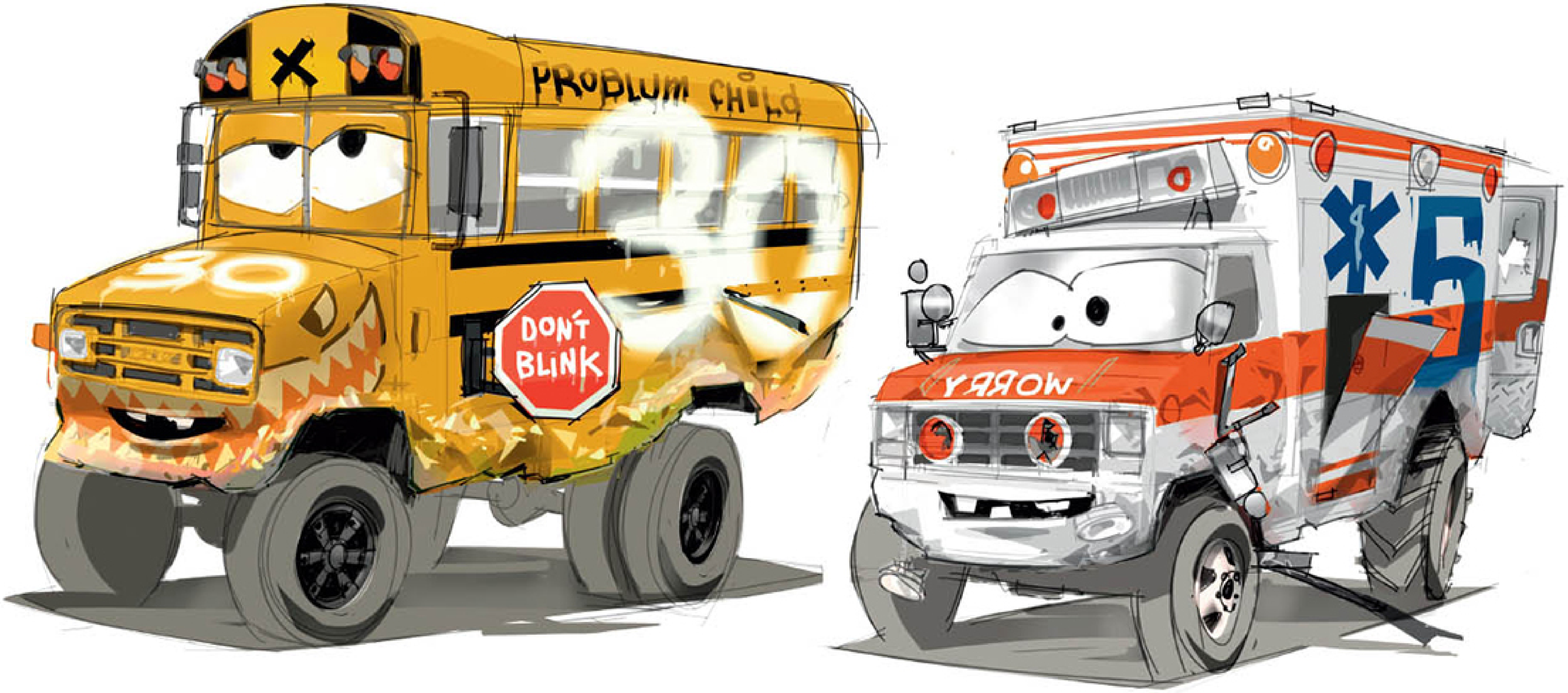




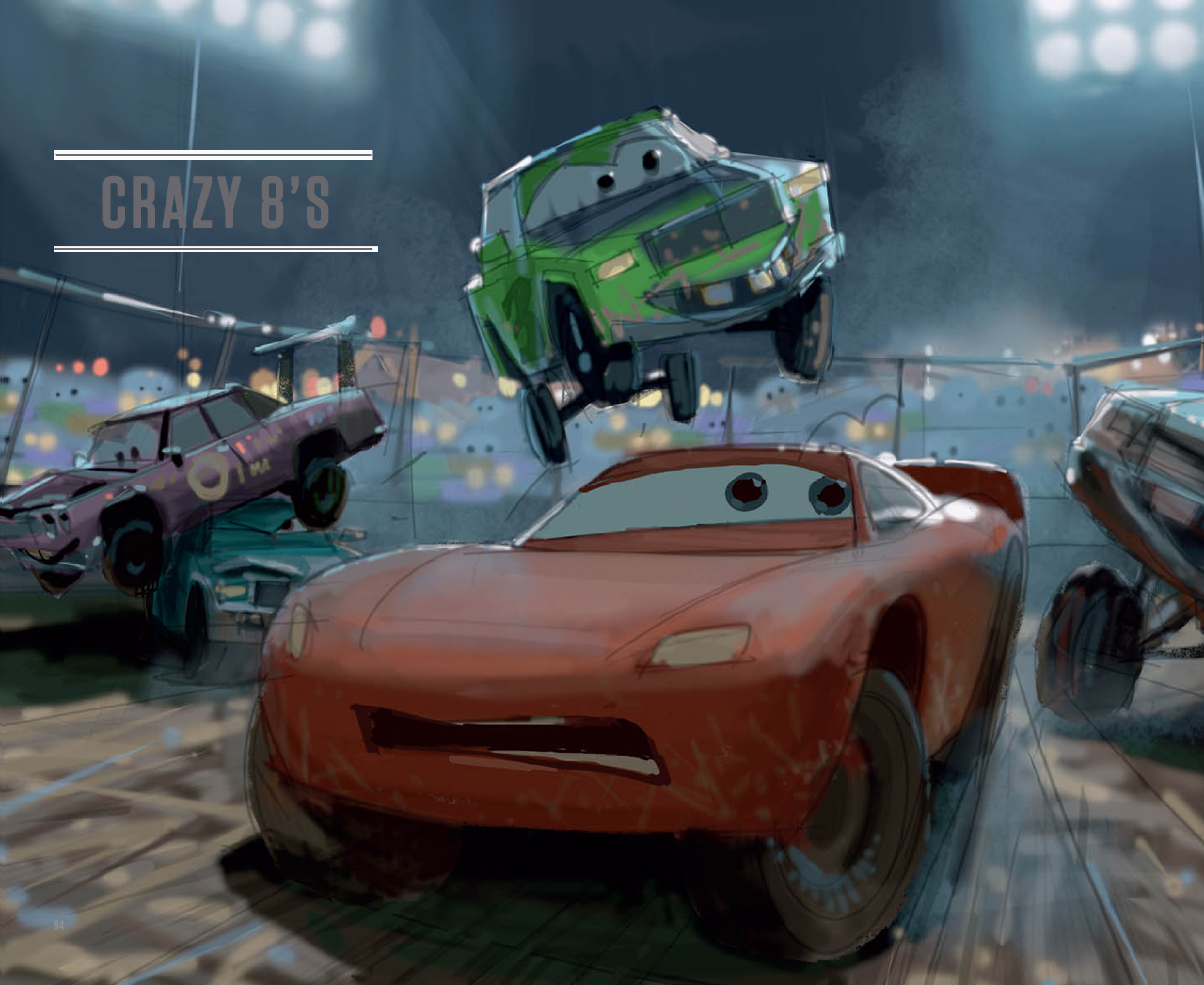
(top) **NOAH KLOCEK** Digital; (above) **MICHAEL YATES AND JOHN HOFFMAN** Storyboards; (opposite) **PAUL ABADILLA** Digital

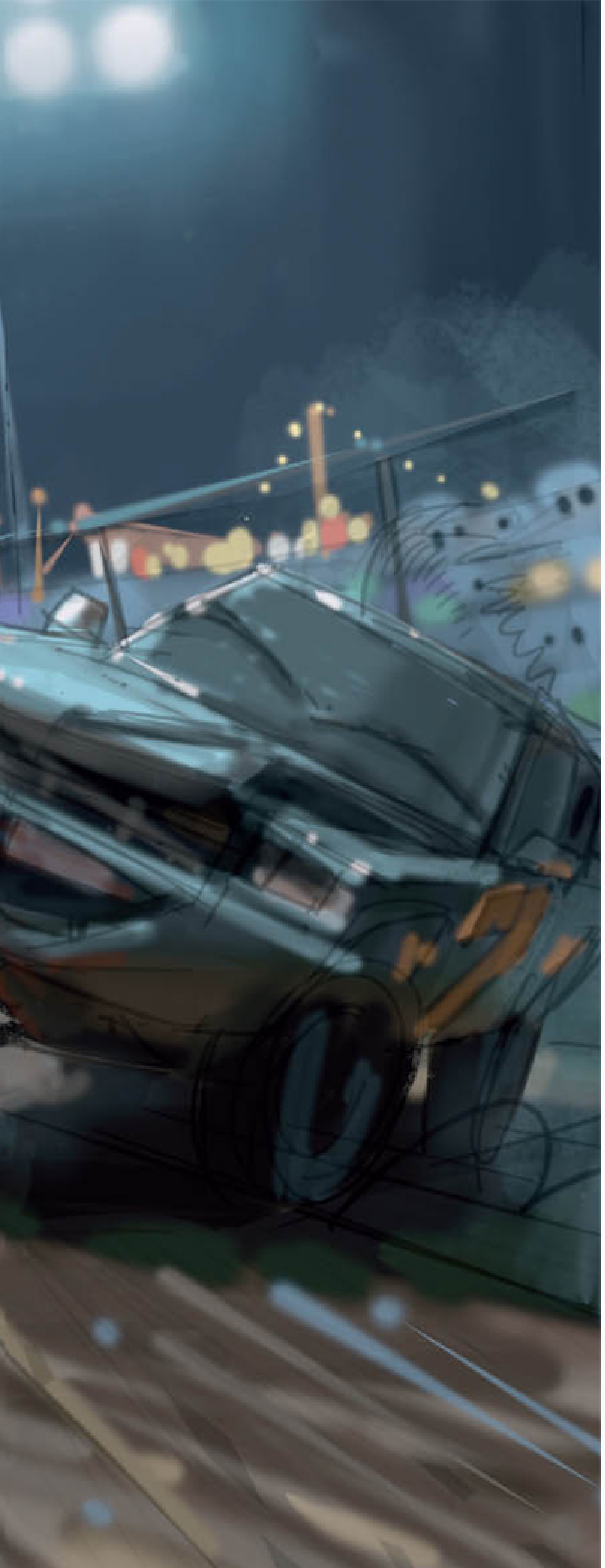
CRAZY 8'S

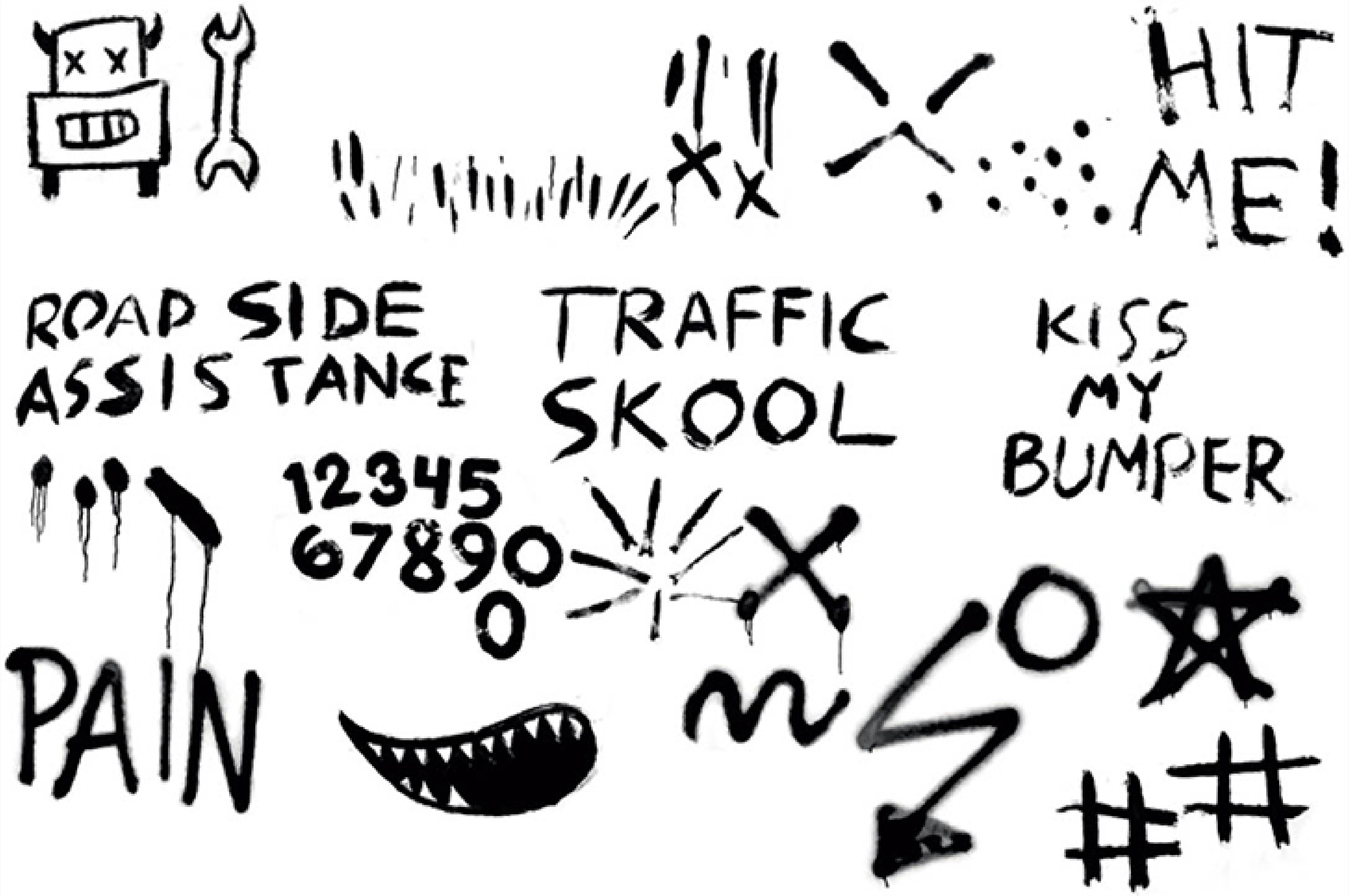



PROBLUM CHILD
30
30
DON'T BLINK
WORRY
5

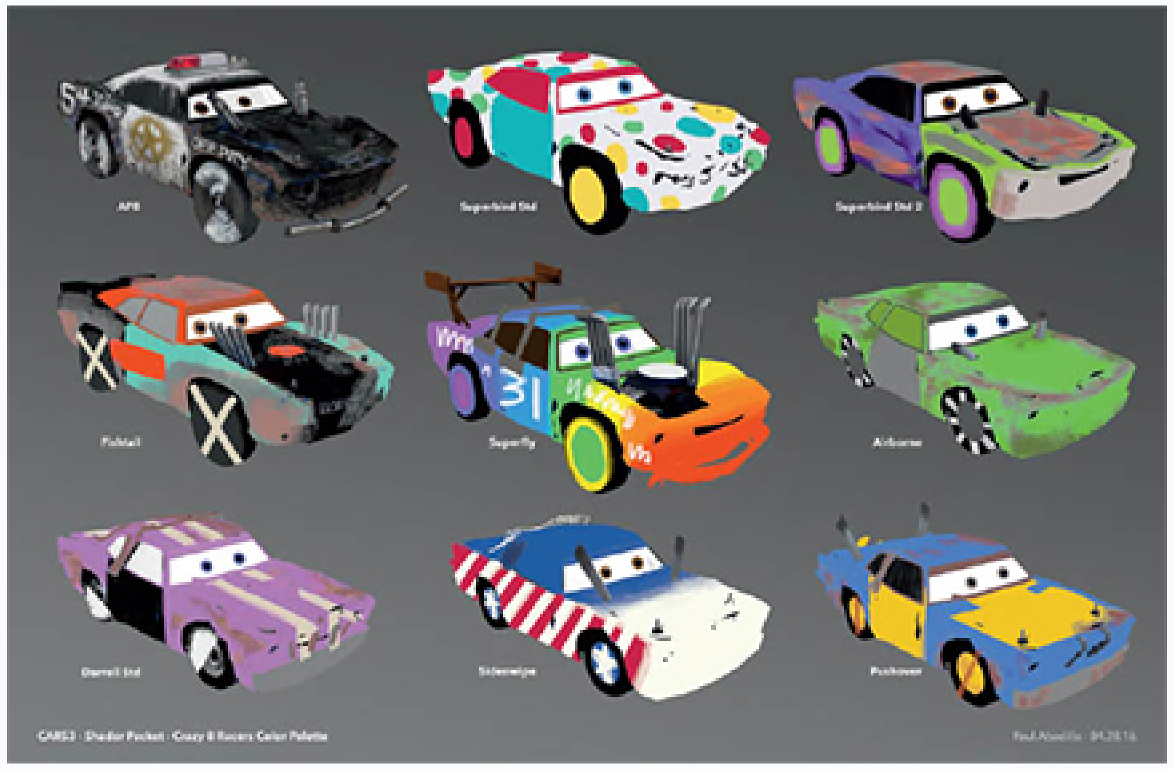
CRAZY 8'S



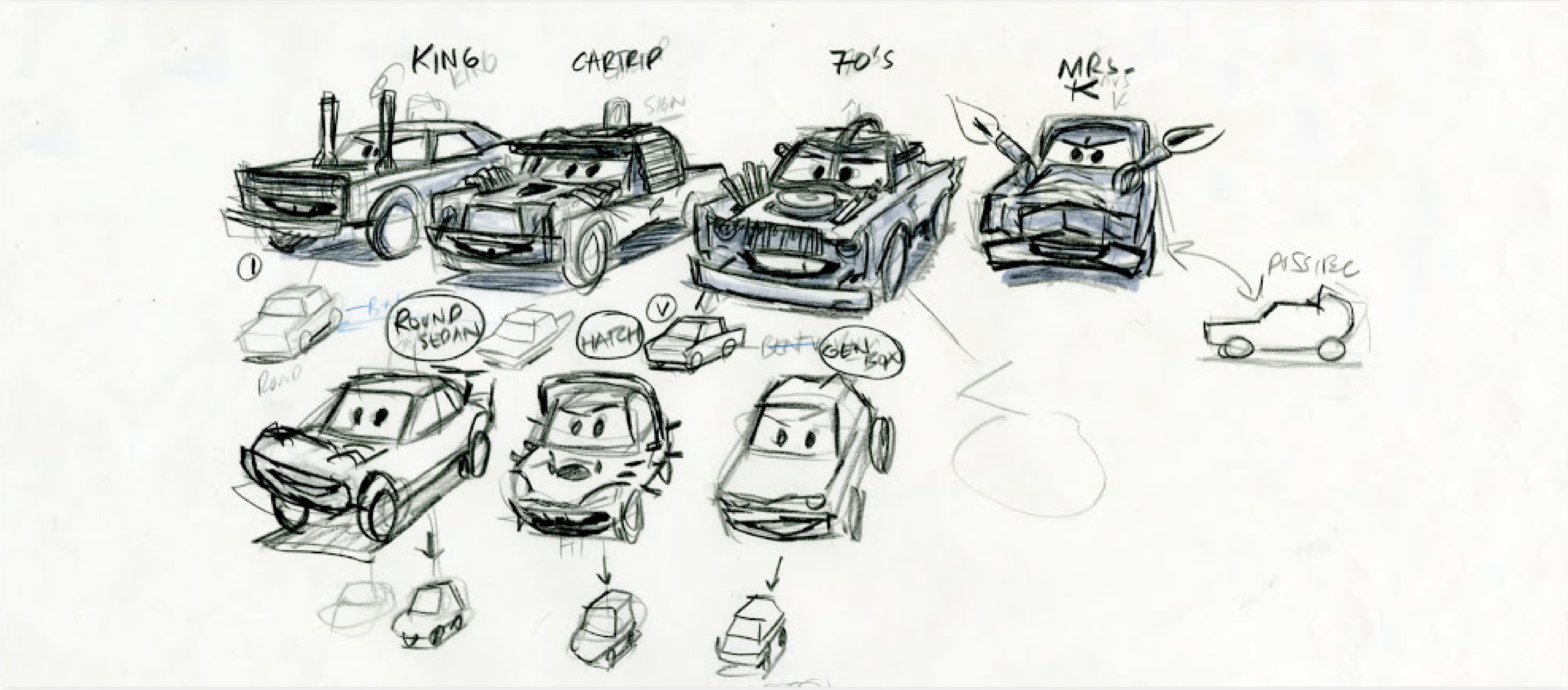


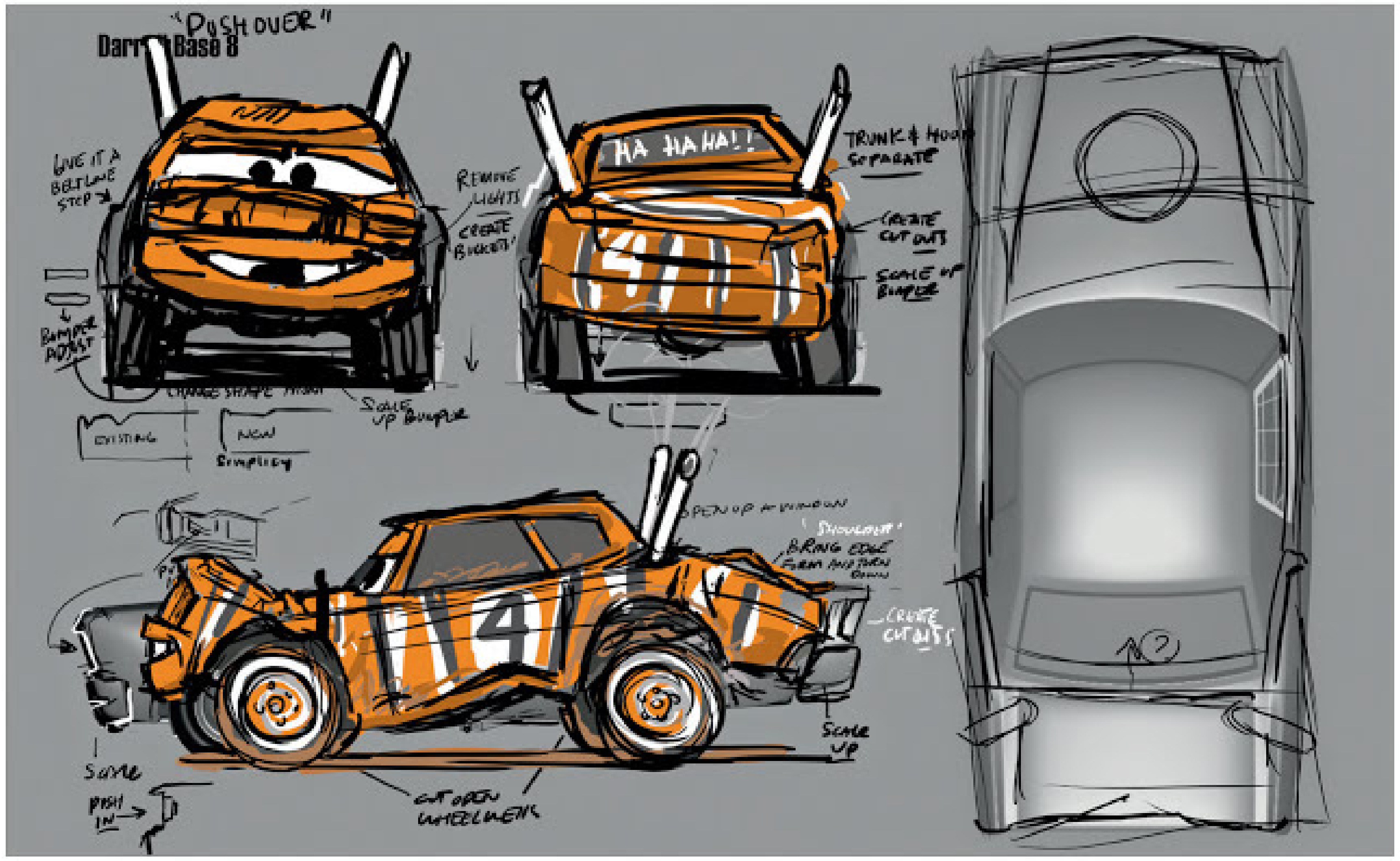

HIT ME!
ROAD SIDE ASSISTANCE
TRAFFIC SKOOL
KISS MY BUMPER
12345
67890
0
PAIN

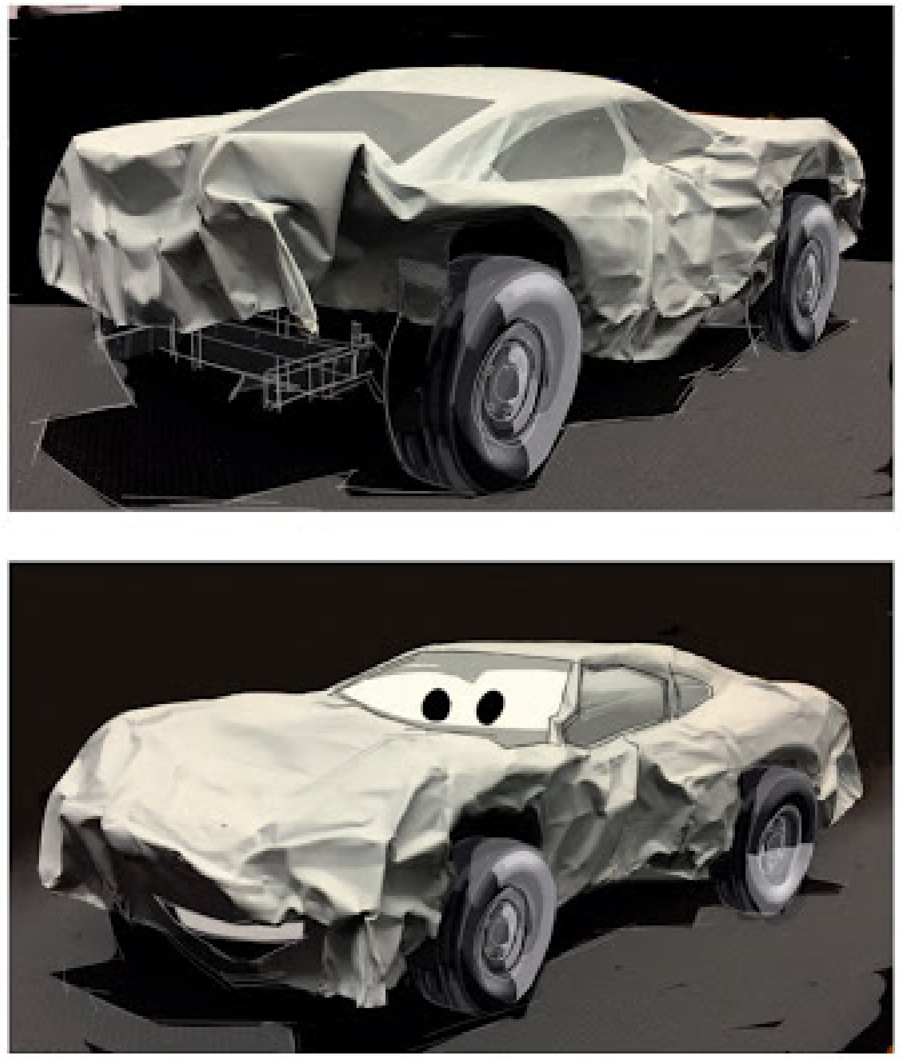
123
TRAFFIC SCHOOL


APB
Superbird Std
Superbird Std 2
Fishtail
Superfly
Airborne
Darrell Std
Sideswipe
Pushover
CARS3 · Shader Pocket · Crazy 8 Racers Color Palette
Paul Abadilla · 09.28.16

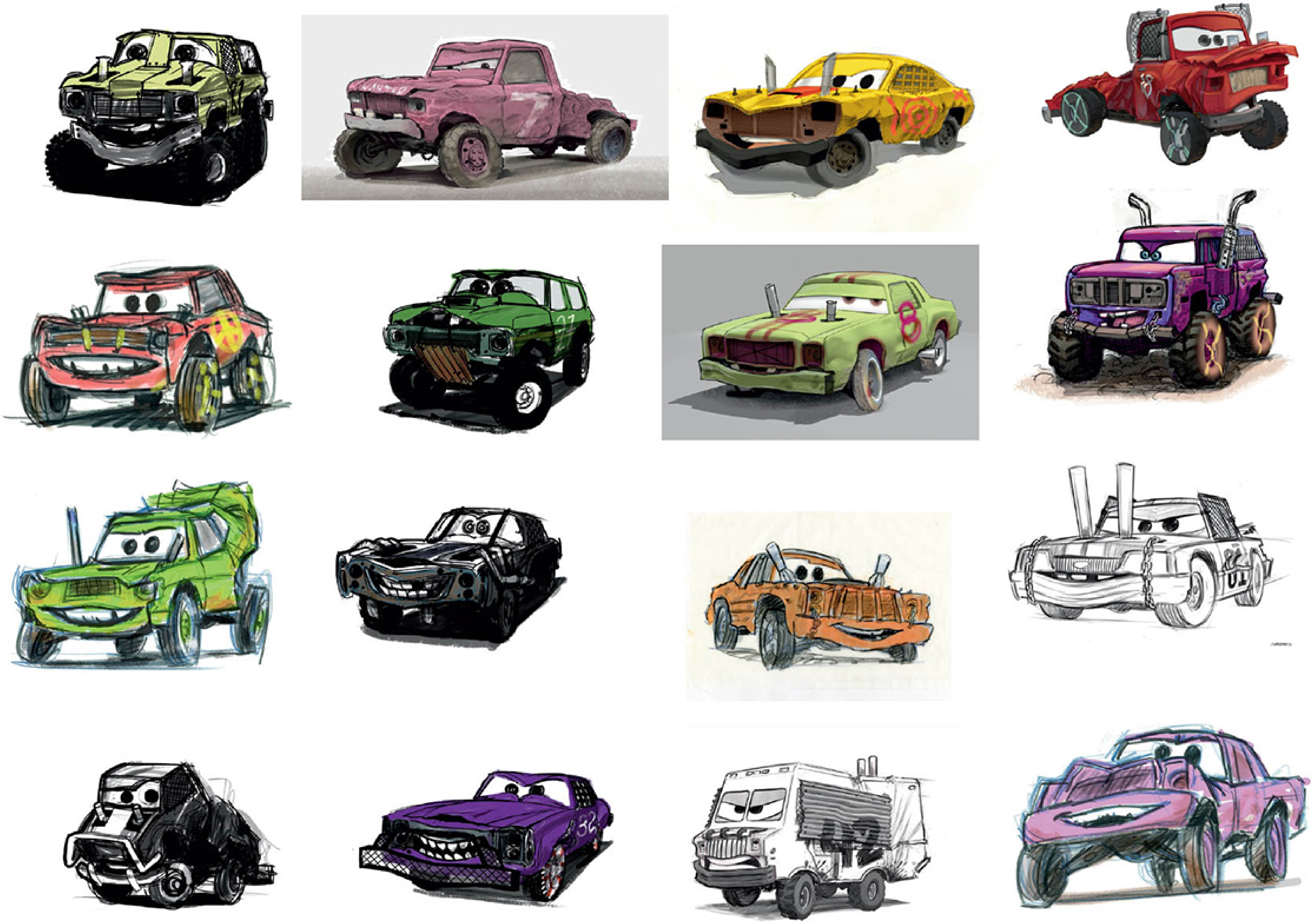
(top) **BERT BERRY** Spray Paint; (bottom left) **GREG PELTZ** Photography; (bottom right) **PAUL ABADILLA** Digital;
(left) **BILL CONE, JAY SHUSTER** Digital


KING
CARTRIP
70'S
MRS. K
SIGN
①
ROUND SEDAN
HATCH
Ⓥ
GEN BOX
POSSIBLE

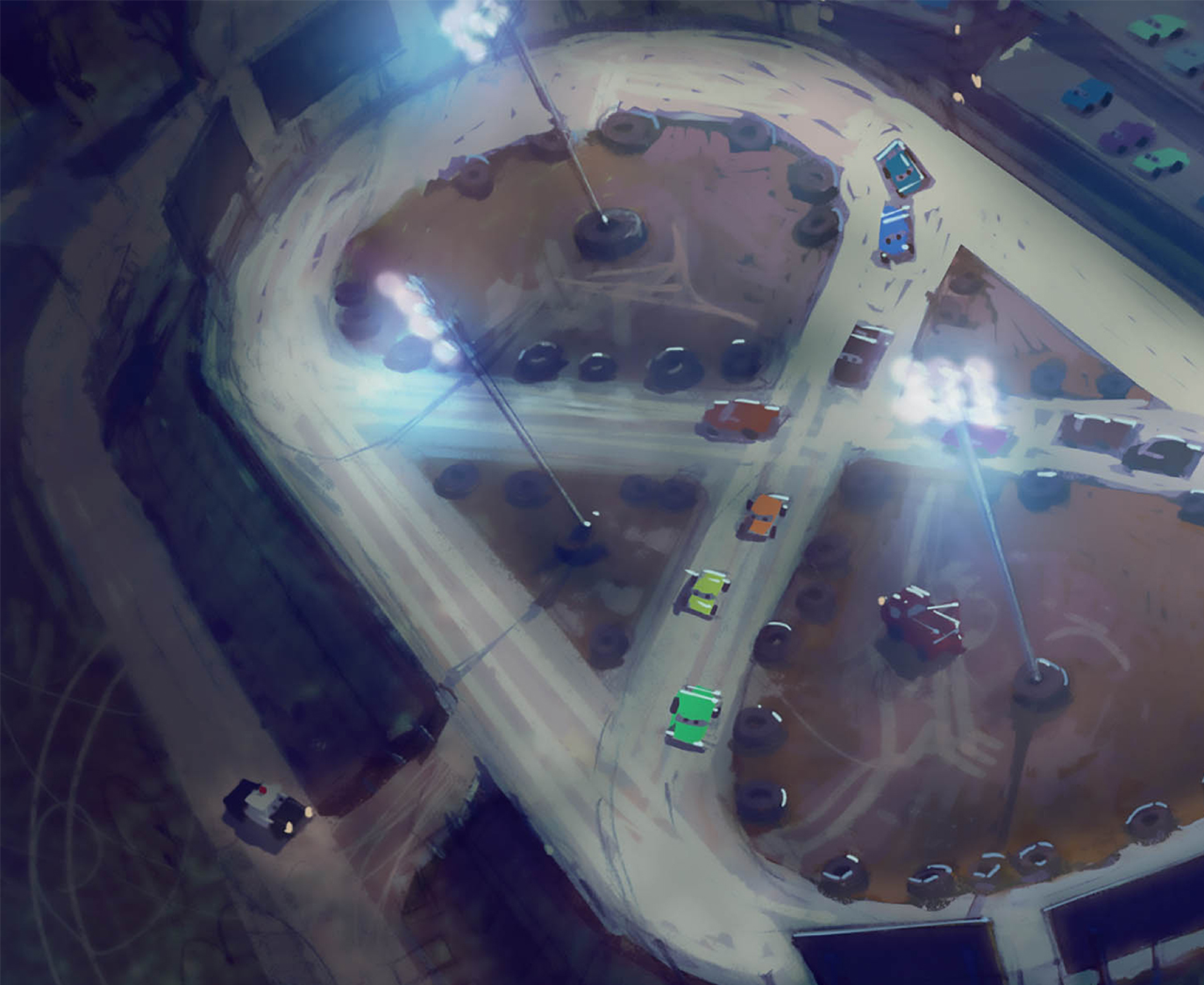

"PUSH OVER"
Darr Base 8
GIVE IT A BELTLINE STEP
REMOVE LIGHTS
CREATE BUCKETS!
HA HA HA!!
TRUNK & HOOD SEPARATE
CREATE CUT OUTS
SCALE UP BUMPER
BUMPER ADJUST
CHANGE SHAPE
SCALE UP BUMPER
EXISTING
NEW
SIMPLIFY
OPEN UP WINDOW
'SHOULDER' BRING EDGE FORM AND TURN DOWN
CREATE CUT OUTS
SCALE UP
SAME
PUSH IN
CUT OPEN WHEELWELLS
14

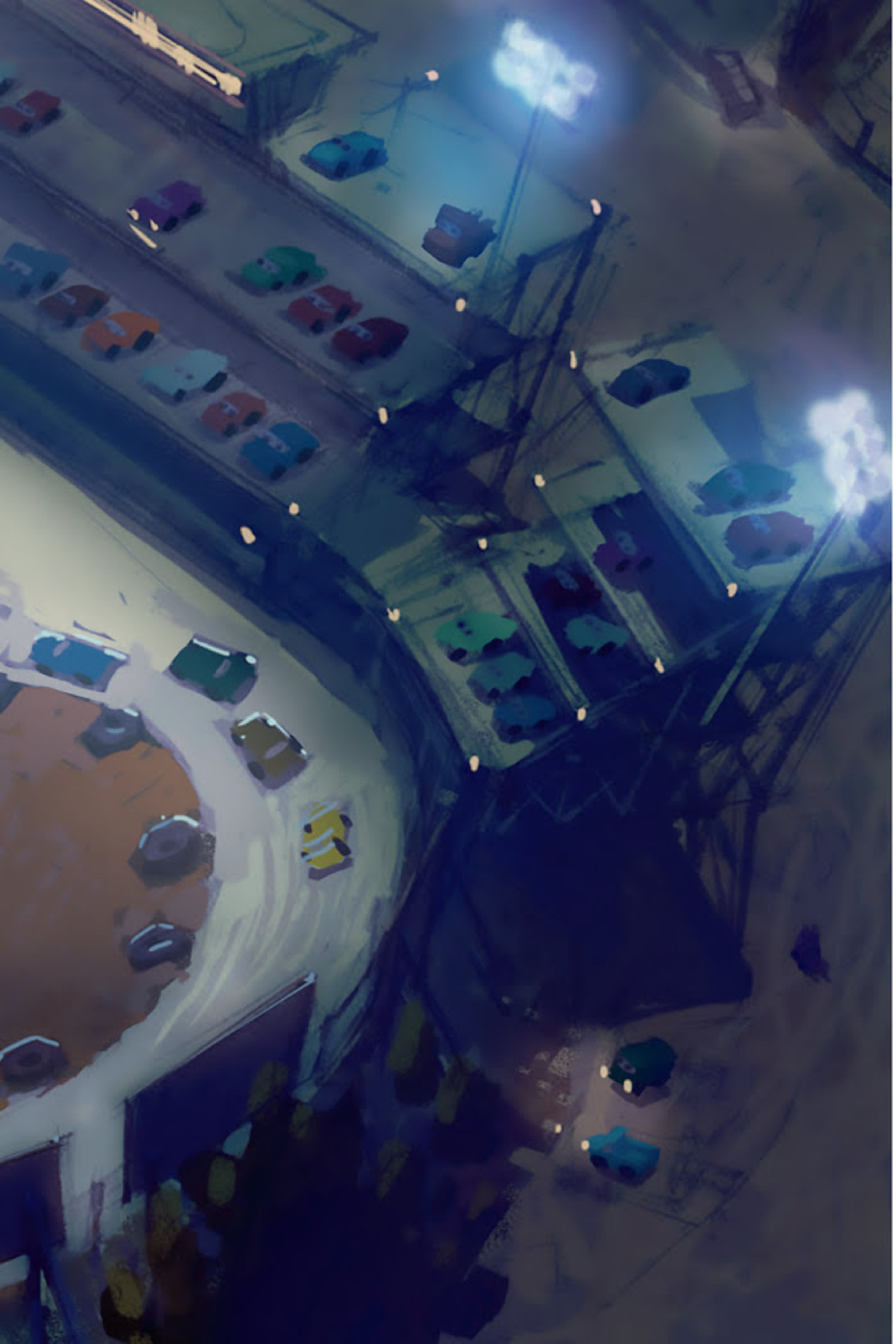


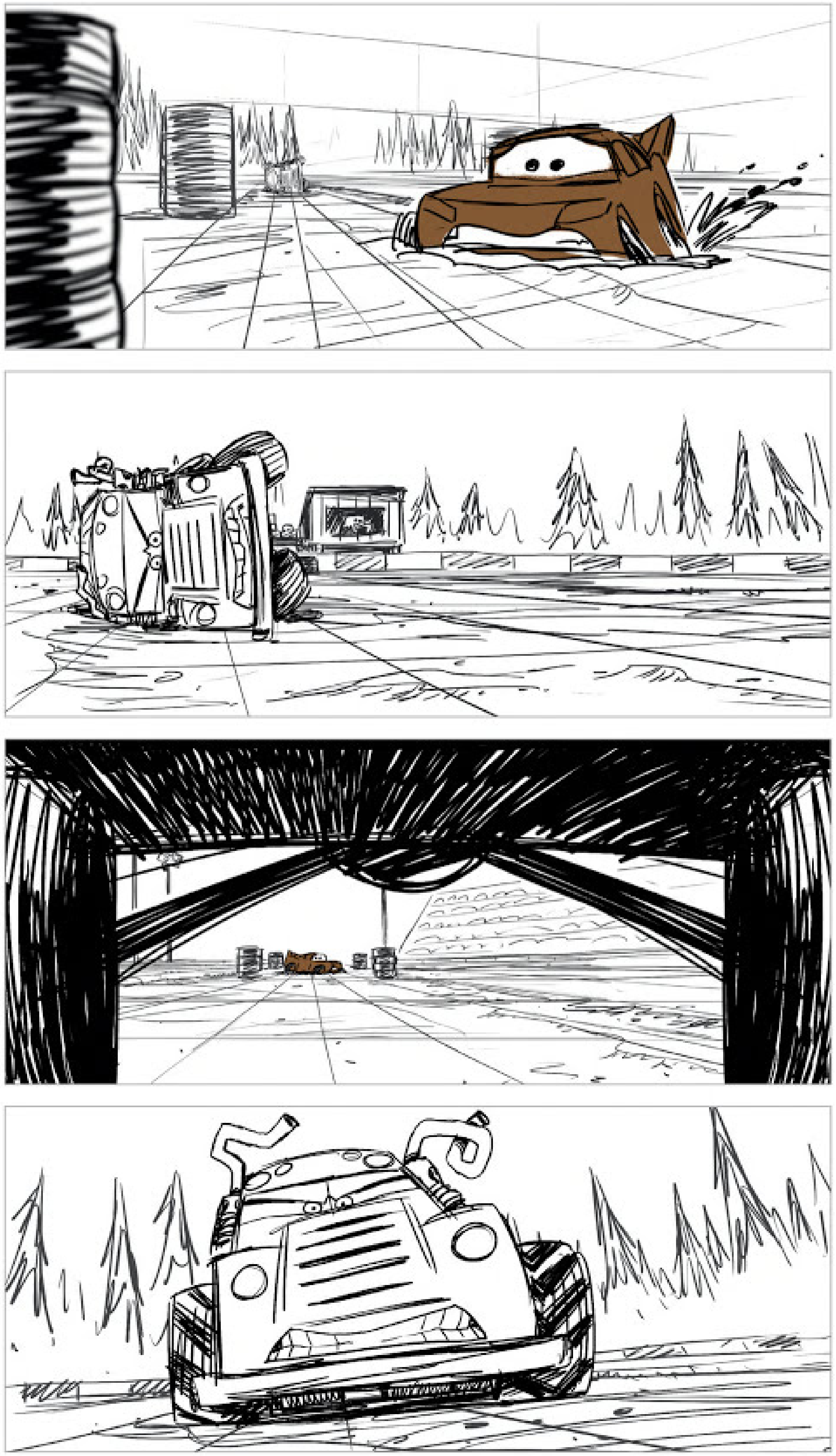
(top) **BOB PAULEY** Marker; (bottom left) **BOB PAULEY** Digital; (bottom right) **JAY SHUSTER** Drawover on aluminum foil, photograph by **DEBBIE COLEMAN**



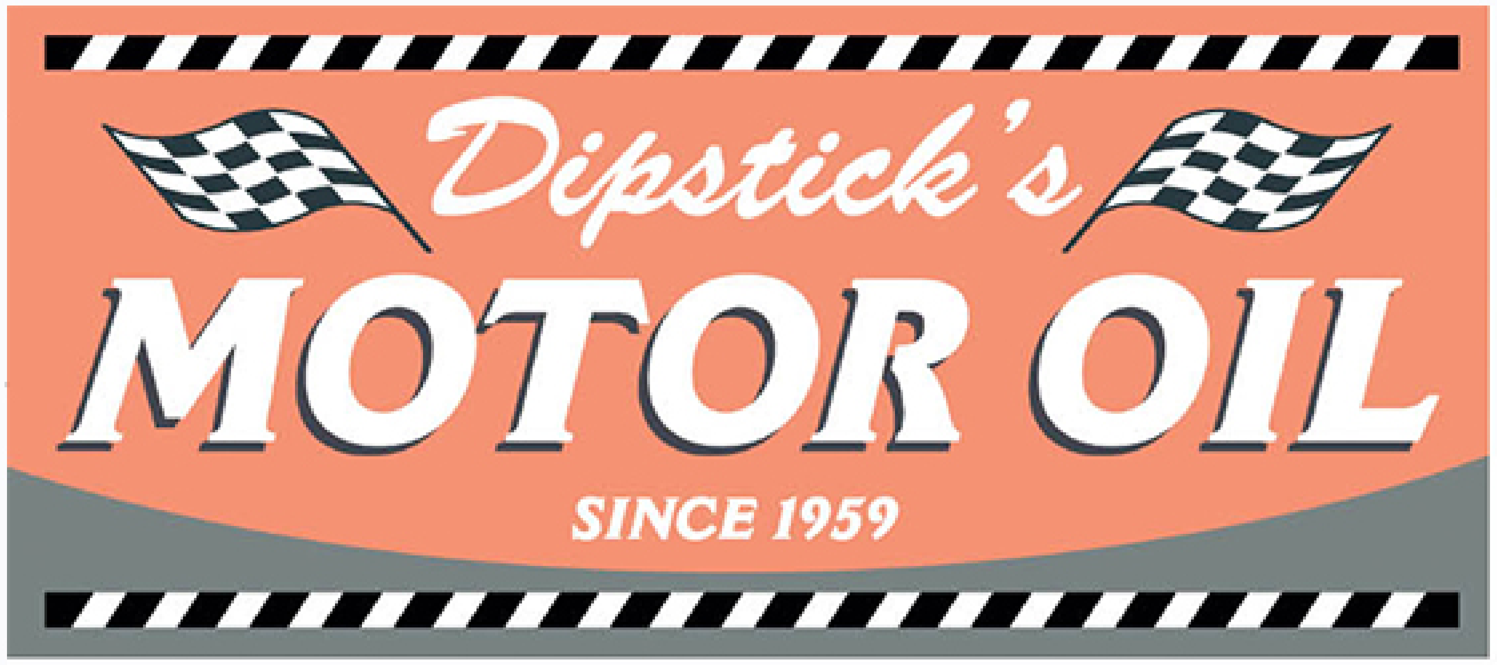
(top row left to right) **DANIEL HOLLAND** Digital, **GARRETT TAYLOR** Digital, **GRANT ALEXANDER** Digital, **JASON DEAMER** Digital; (second row left to right) **BOB PAULEY** pencil and marker, **DANIEL HOLLAND** Digital, **GARRETT TAYLOR** Digital, **BOB PAULEY** pencil and marker, **DANIEL HOLLAND** Digital, **BOB PAULEY** pencil and marker, **JASON DEAMER** Digital; (bottom row left to right) **DANIEL HOLLAND** Digital, **DANIEL HOLLAND** Digital, **JASON DEAMER** Digital, **BOB PAULEY** pencil and marker

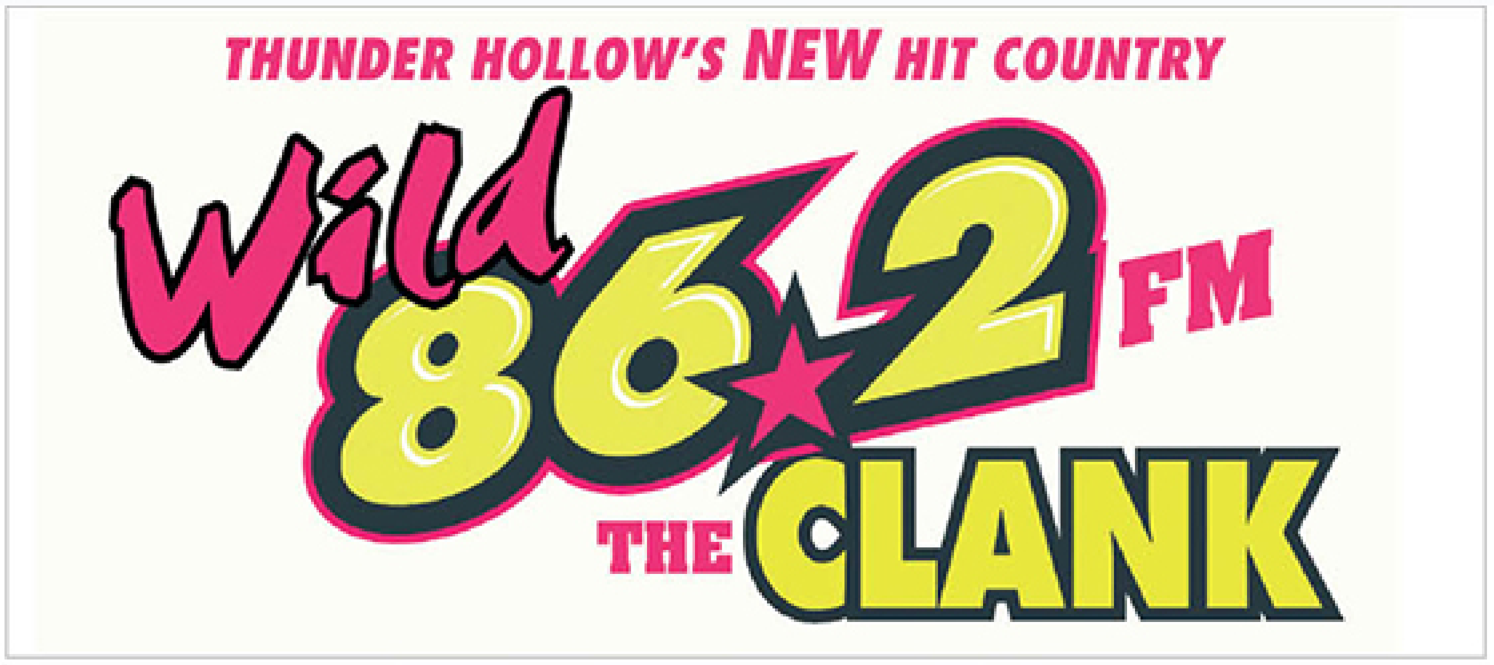


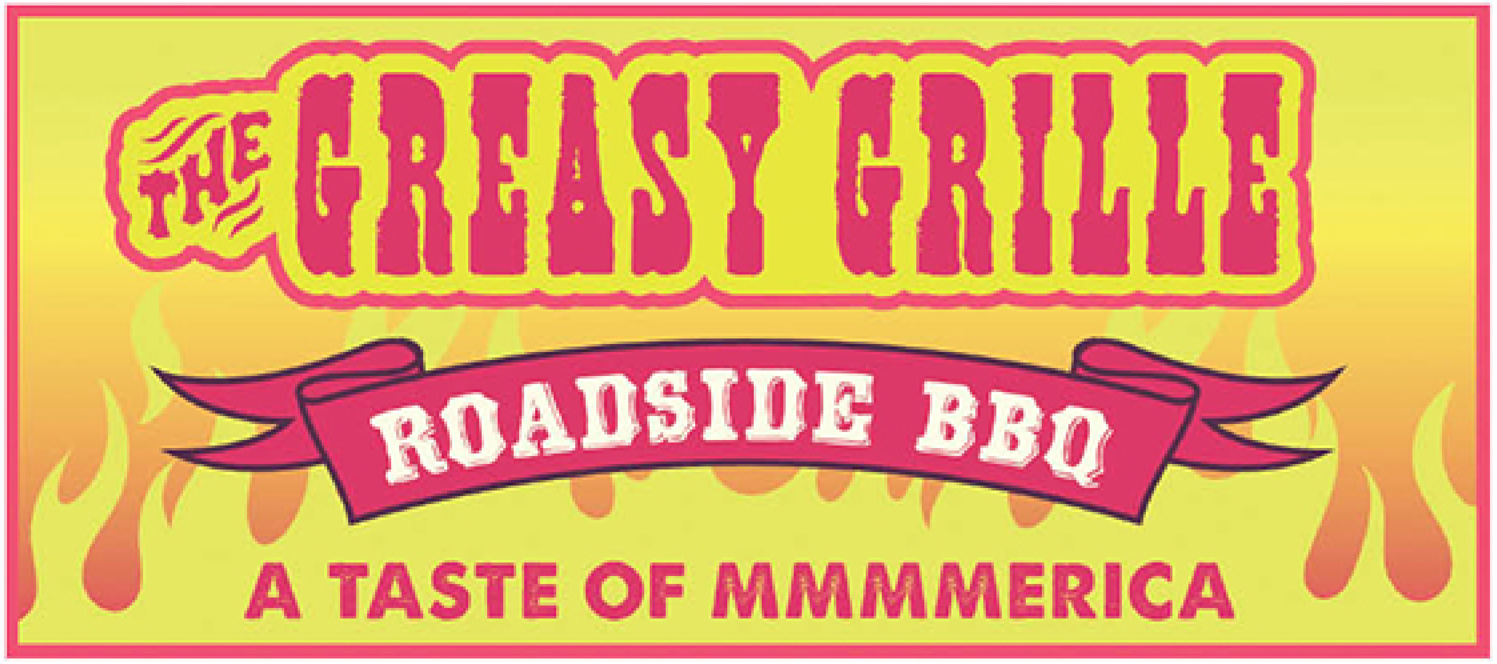


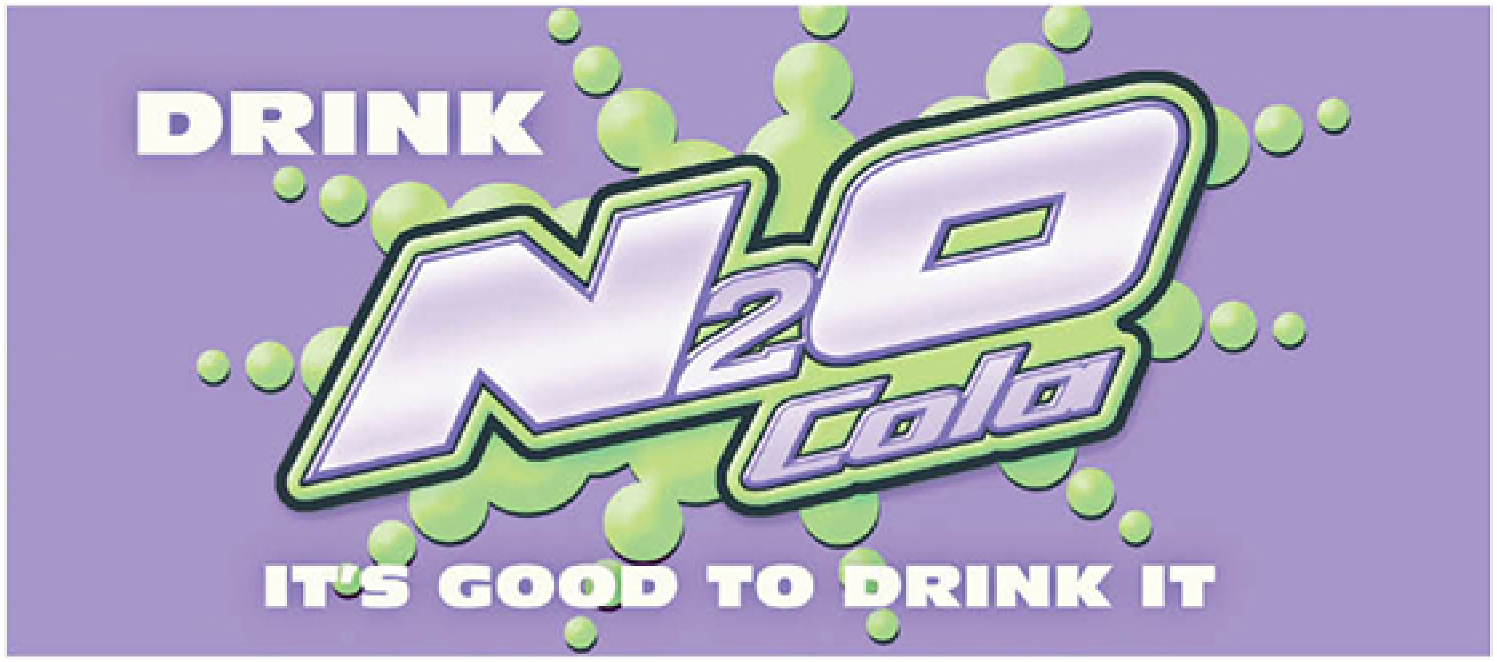


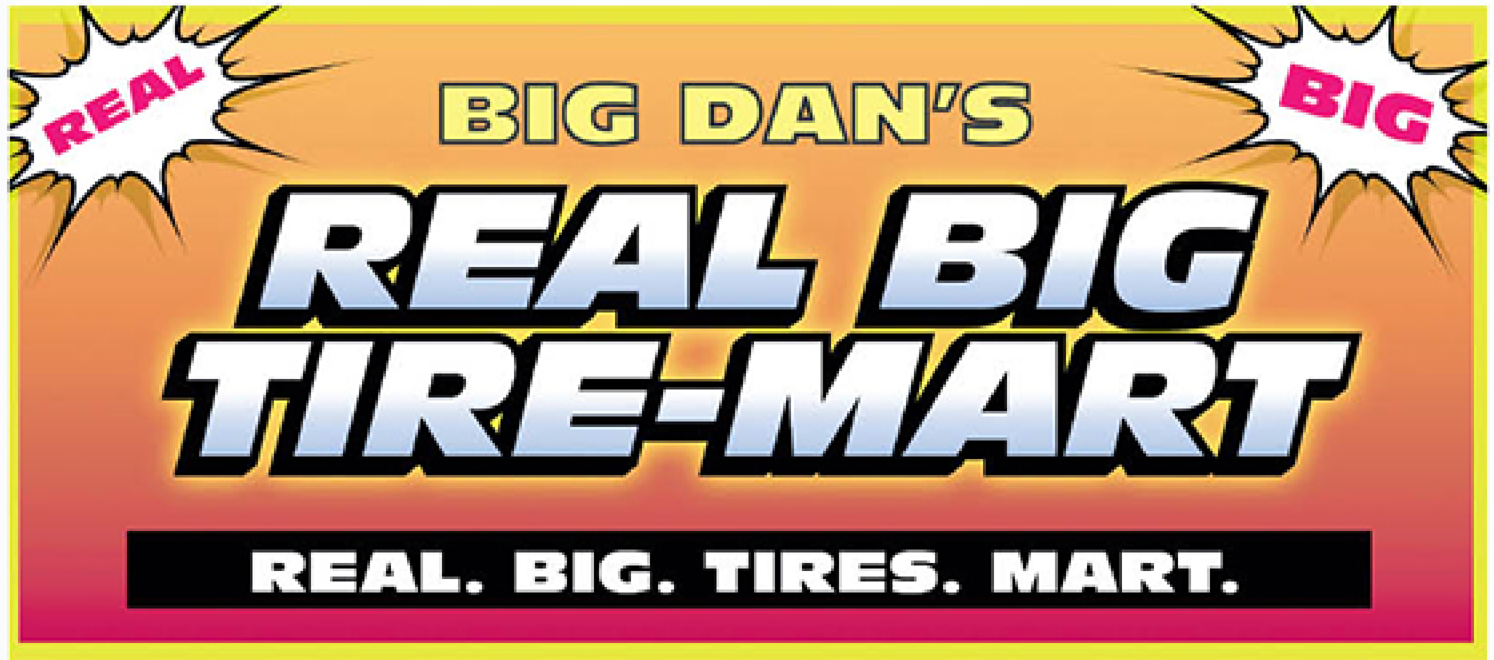
(above) **JOHN HOFFMAN** Storyboards;
(left) **BILL CONE** Digital

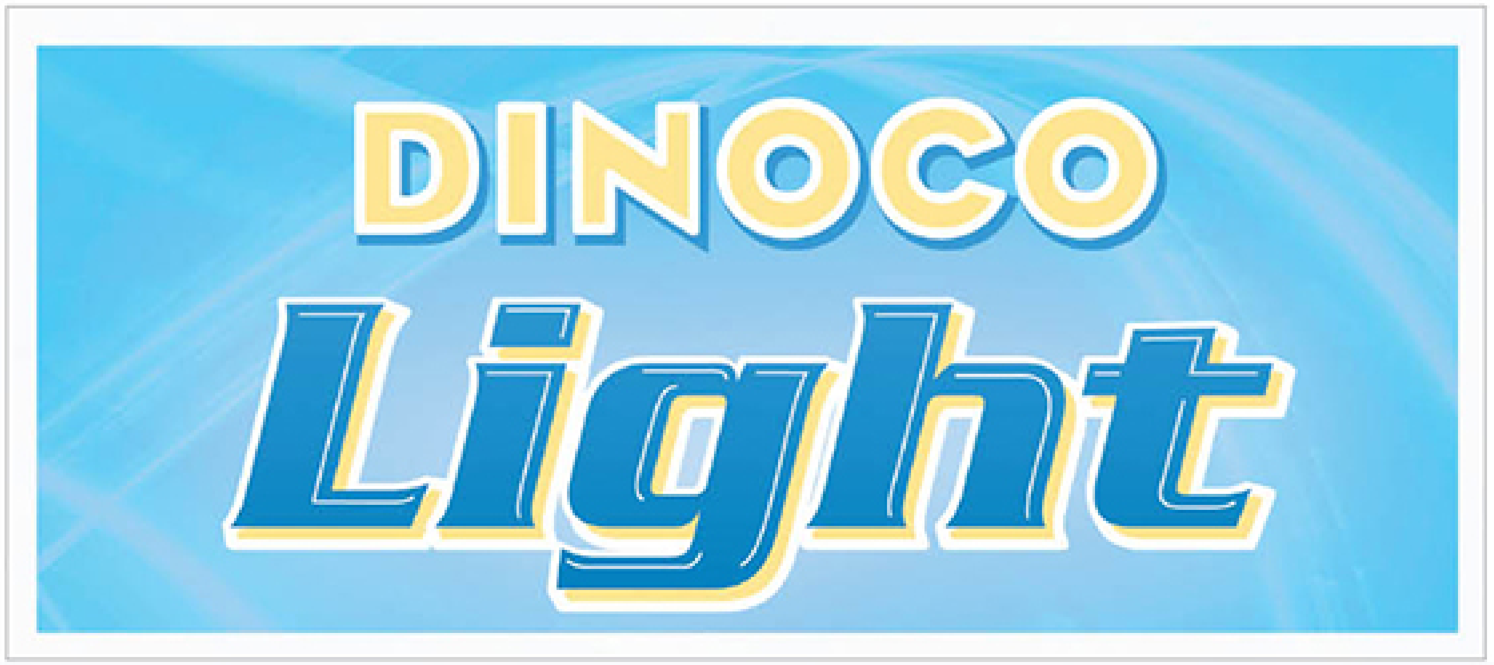

Dipstick's
MOTOR OIL
SINCE 1959

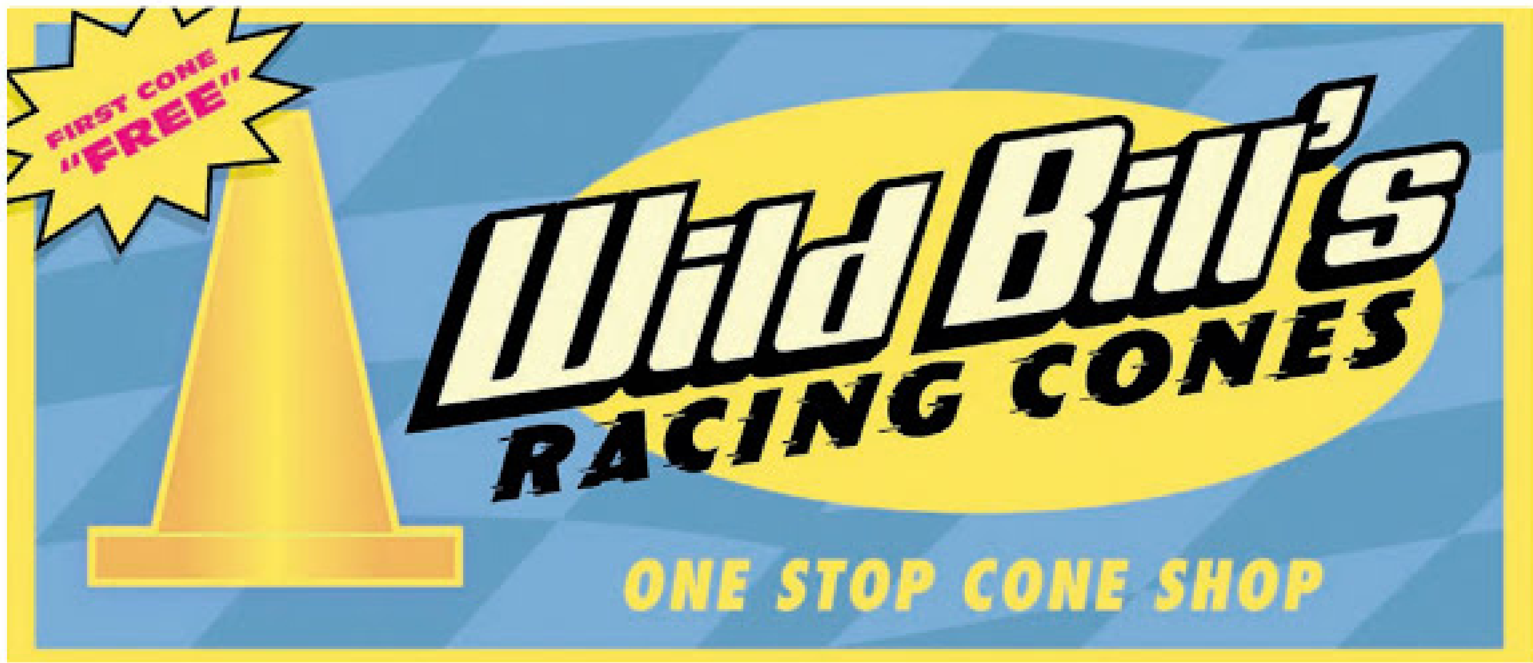

THUNDER HOLLOW'S NEW HIT COUNTRY
Wild 86.2 FM
THE CLANK

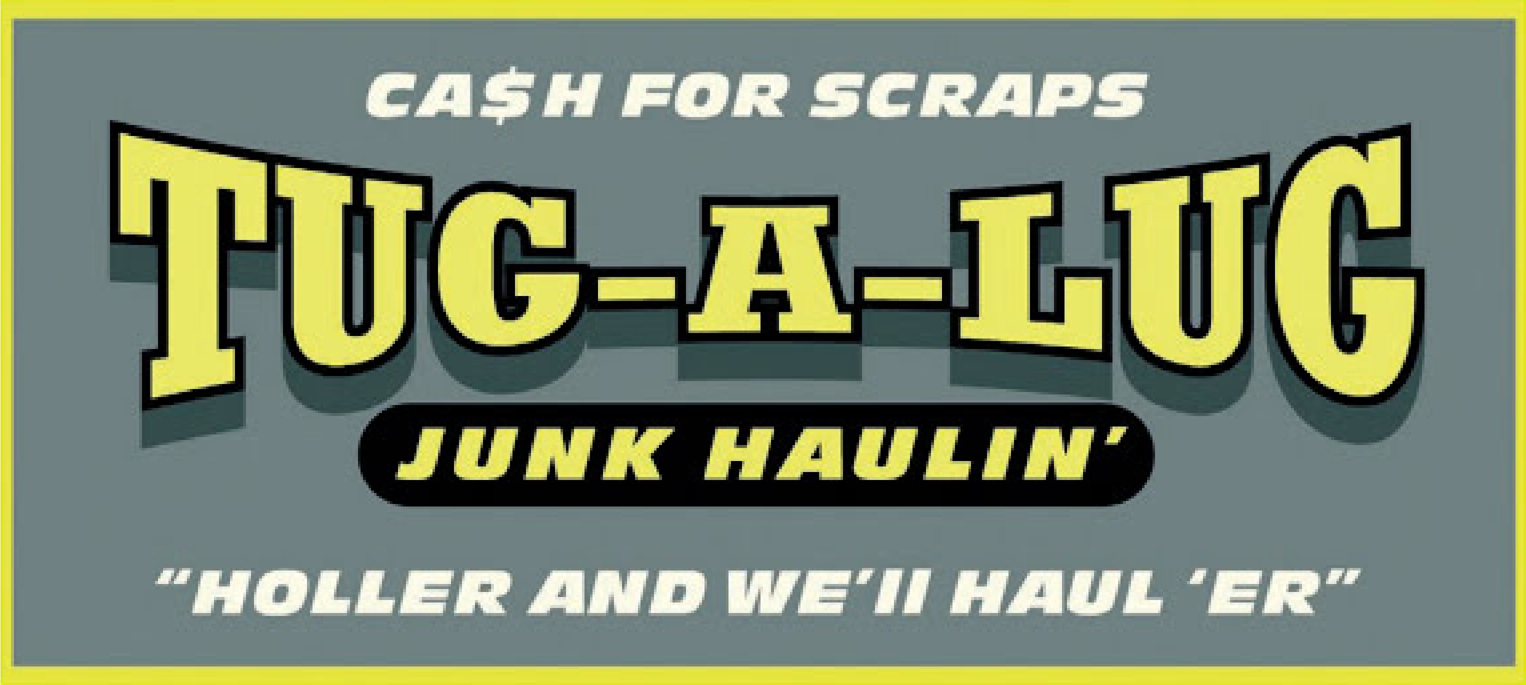

THE GREASY GRILLE
ROADSIDE BBQ
A TASTE OF MMMMERICA

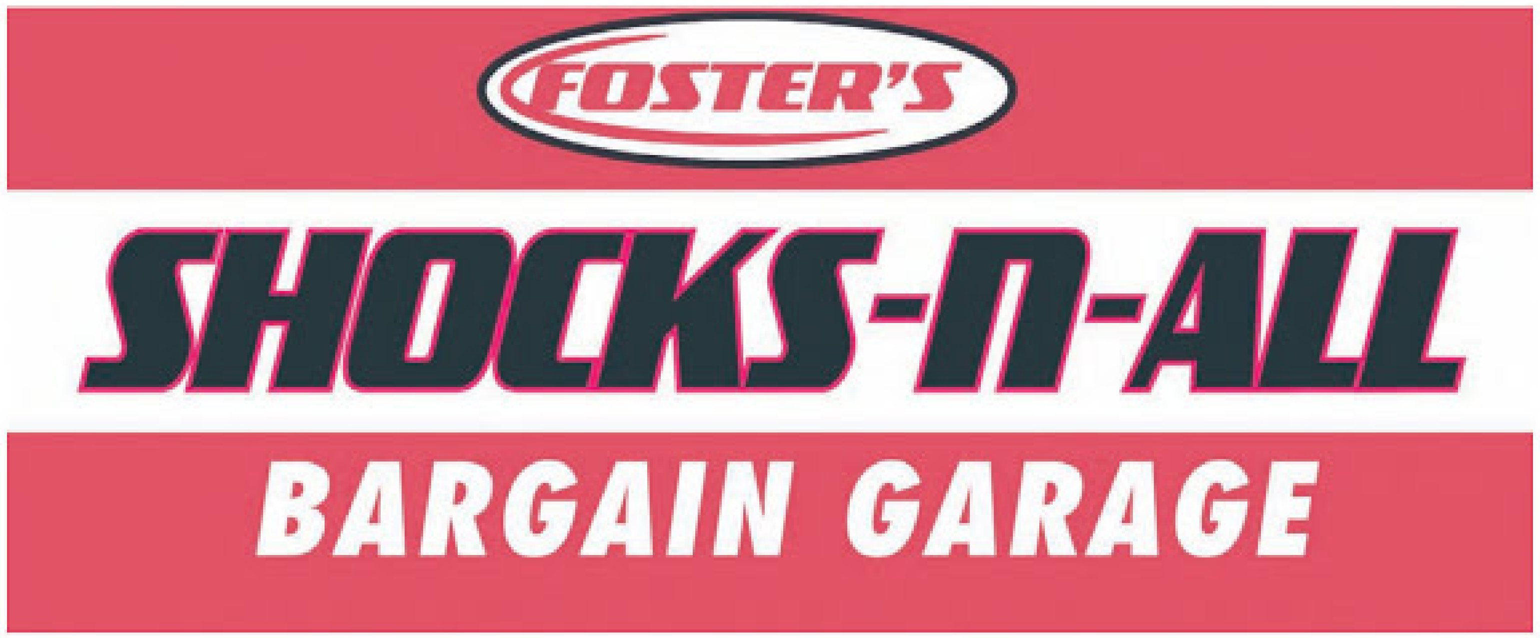

DRINK
N2O
Cola
IT'S GOOD TO DRINK IT


REAL
BIG
BIG DAN'S
REAL BIG
TIRE-MART
REAL. BIG. TIRES. MART.

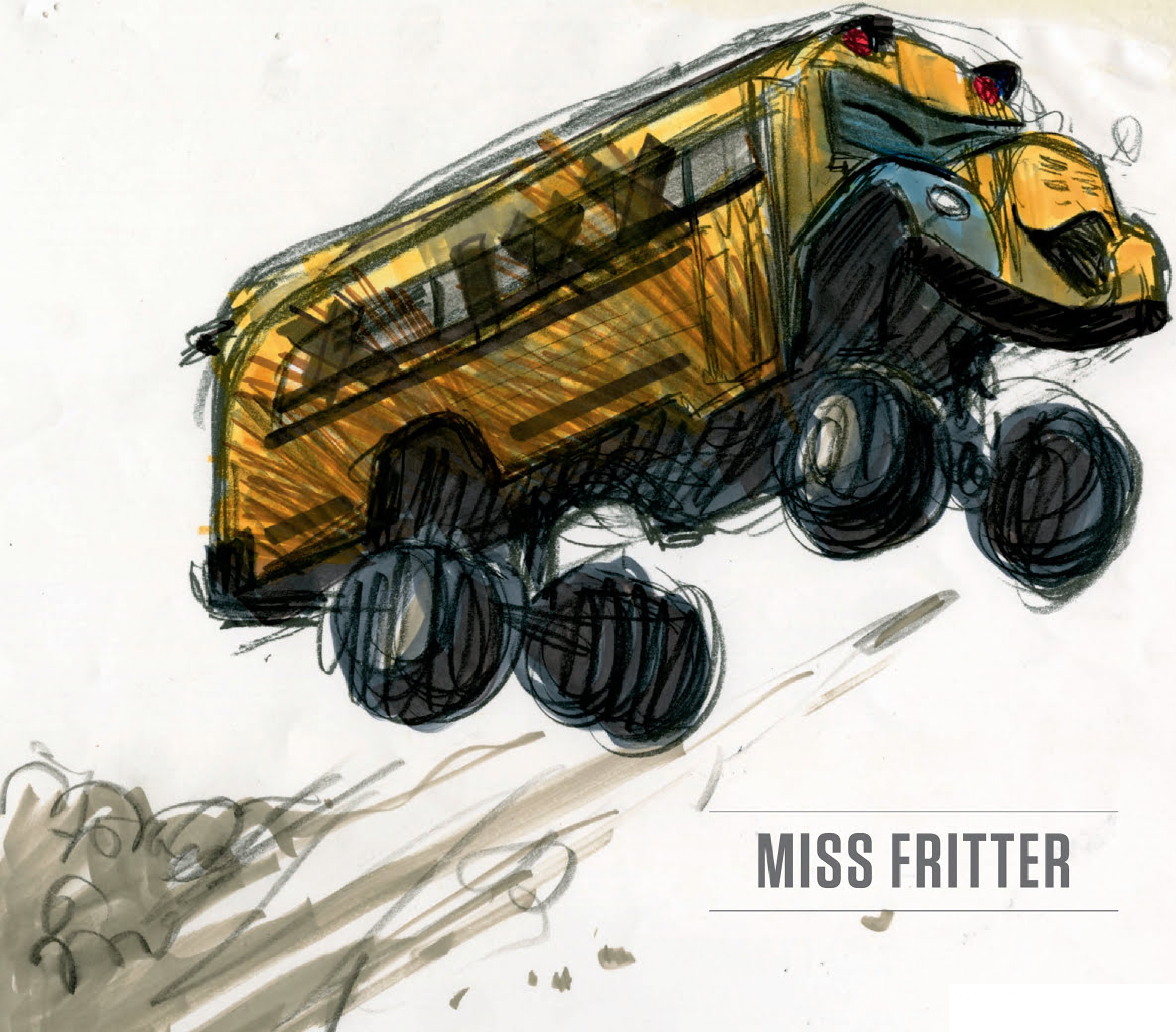

DINOCO
Light


FIRST CONE
"FREE"
Wild Bill's
RACING CONES
ONE STOP CONE SHOP

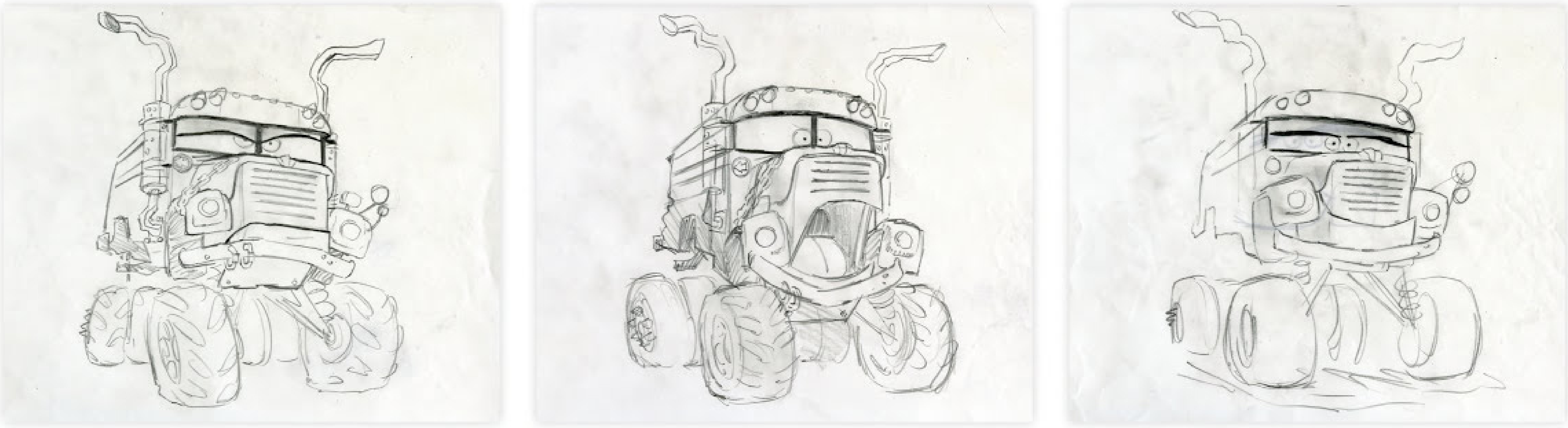

CA$H FOR SCRAPS
TUG-A-LUG
JUNK HAULIN'
"HOLLER AND WE'll HAUL 'ER"

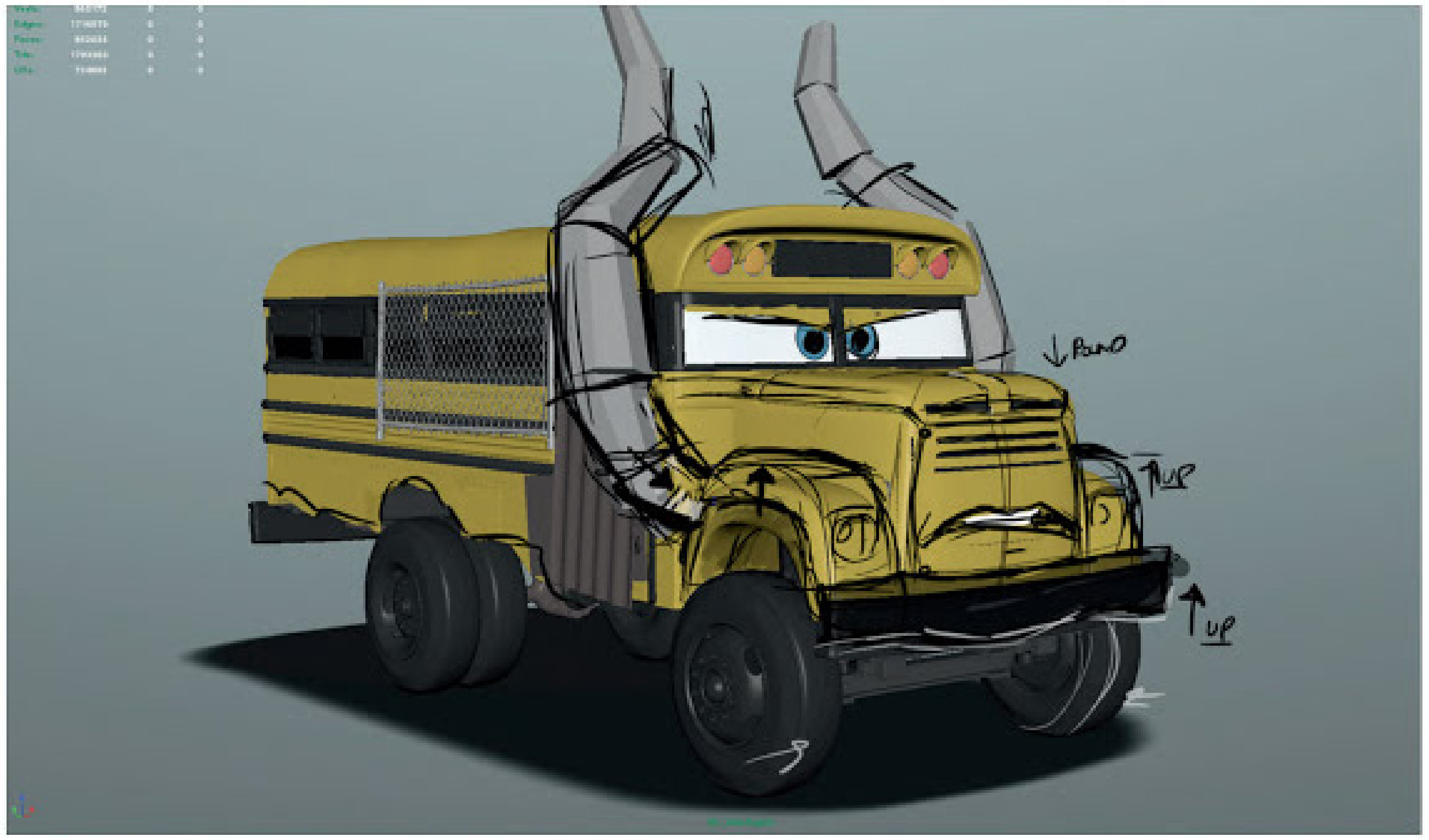

FOSTER'S
SHOCKS-N-ALL
BARGAIN GARAGE

JOSH HOLTSCLAW Digital

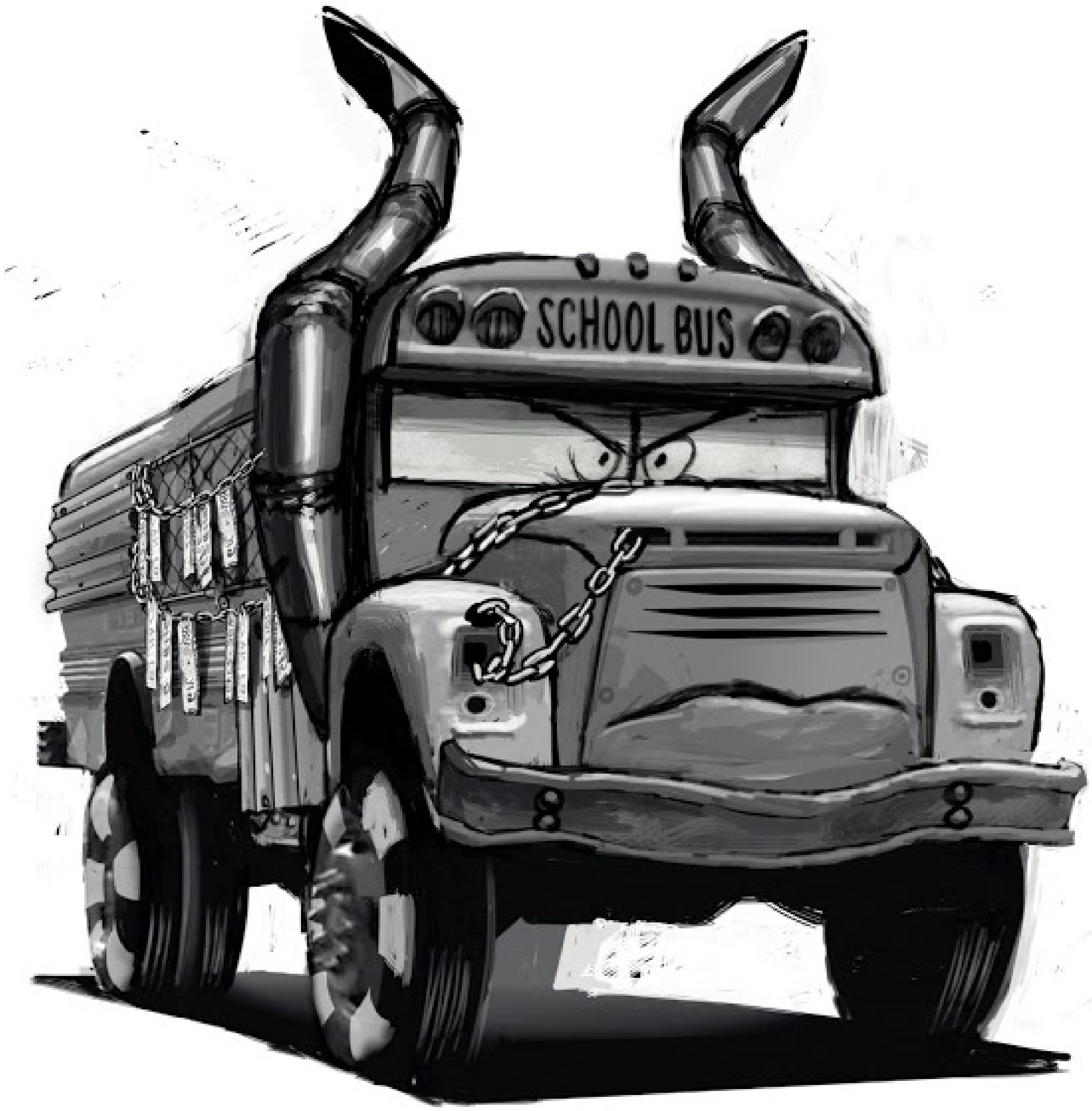


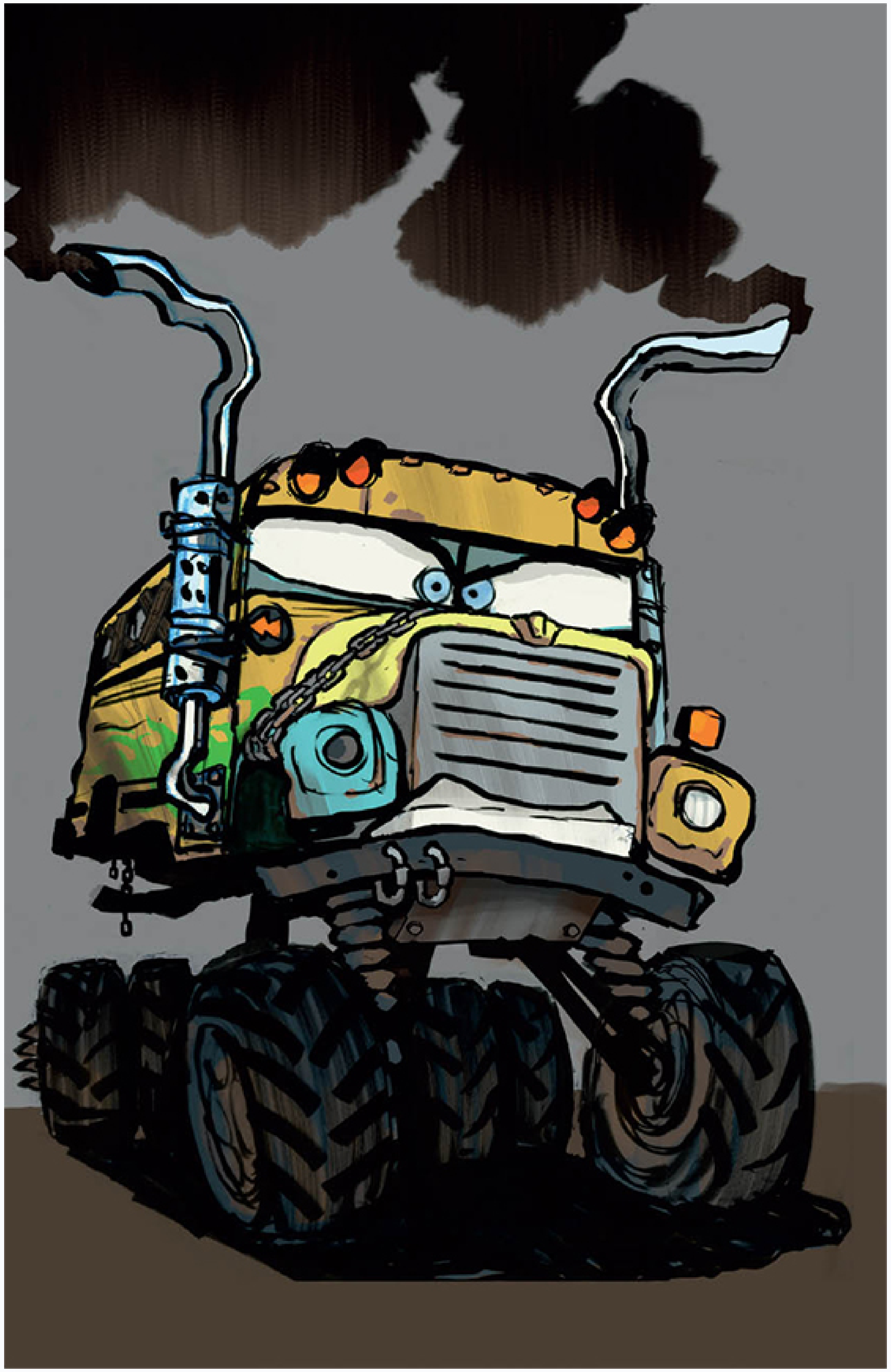
MISS FRITTER

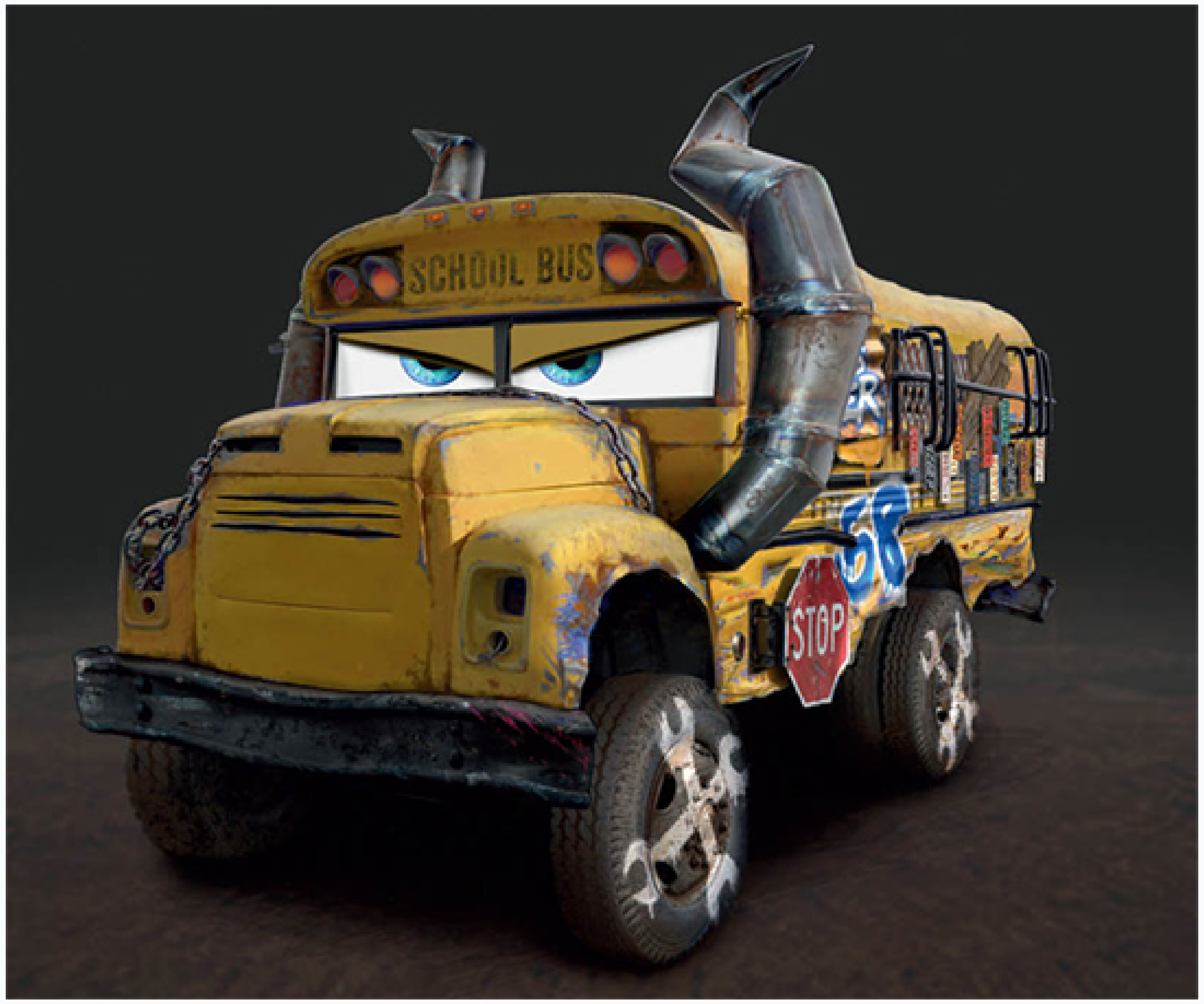


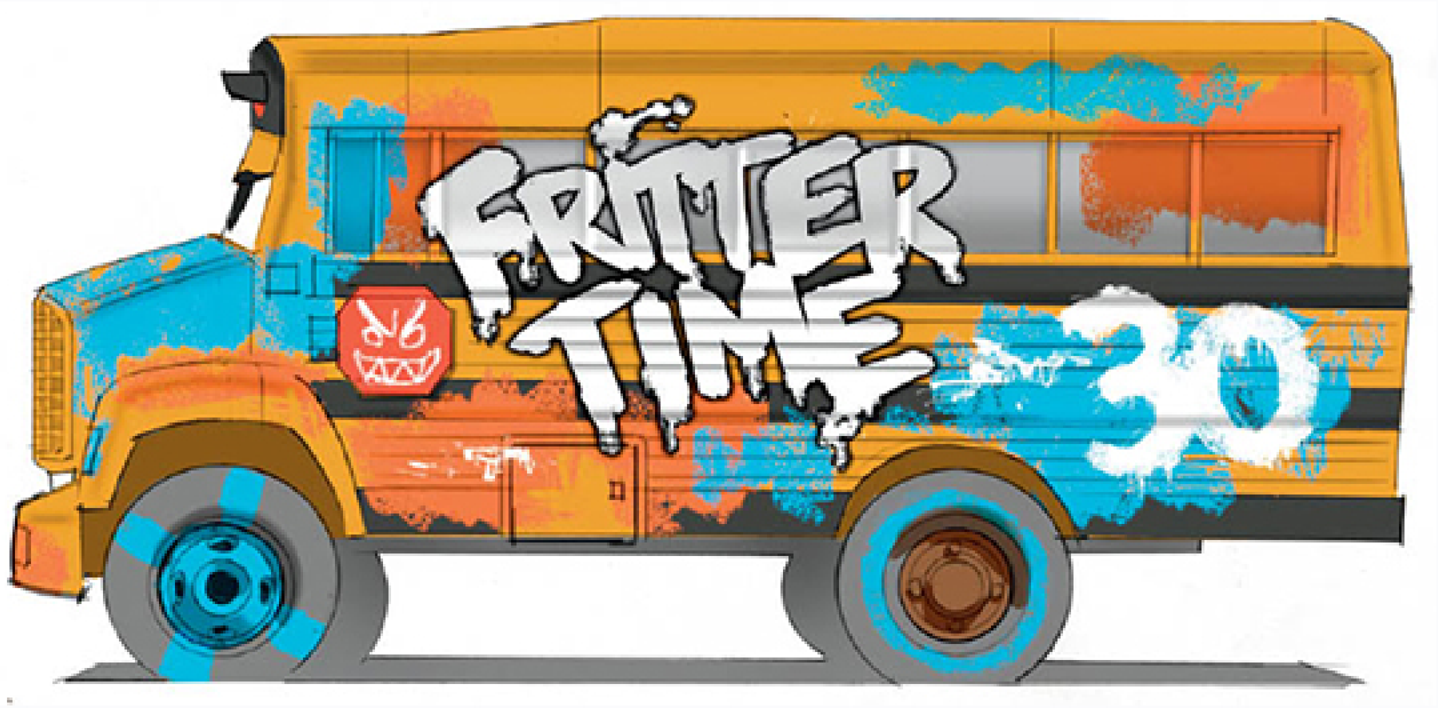


(top row) **MATT NOLTE** Pencil; (above) Design by **BOB PAULEY**, Model by **SAL MELLUSO**;
(right) **JOHN LEE** Digital; (opposite) **MATT NOLTE** Pencil and marker

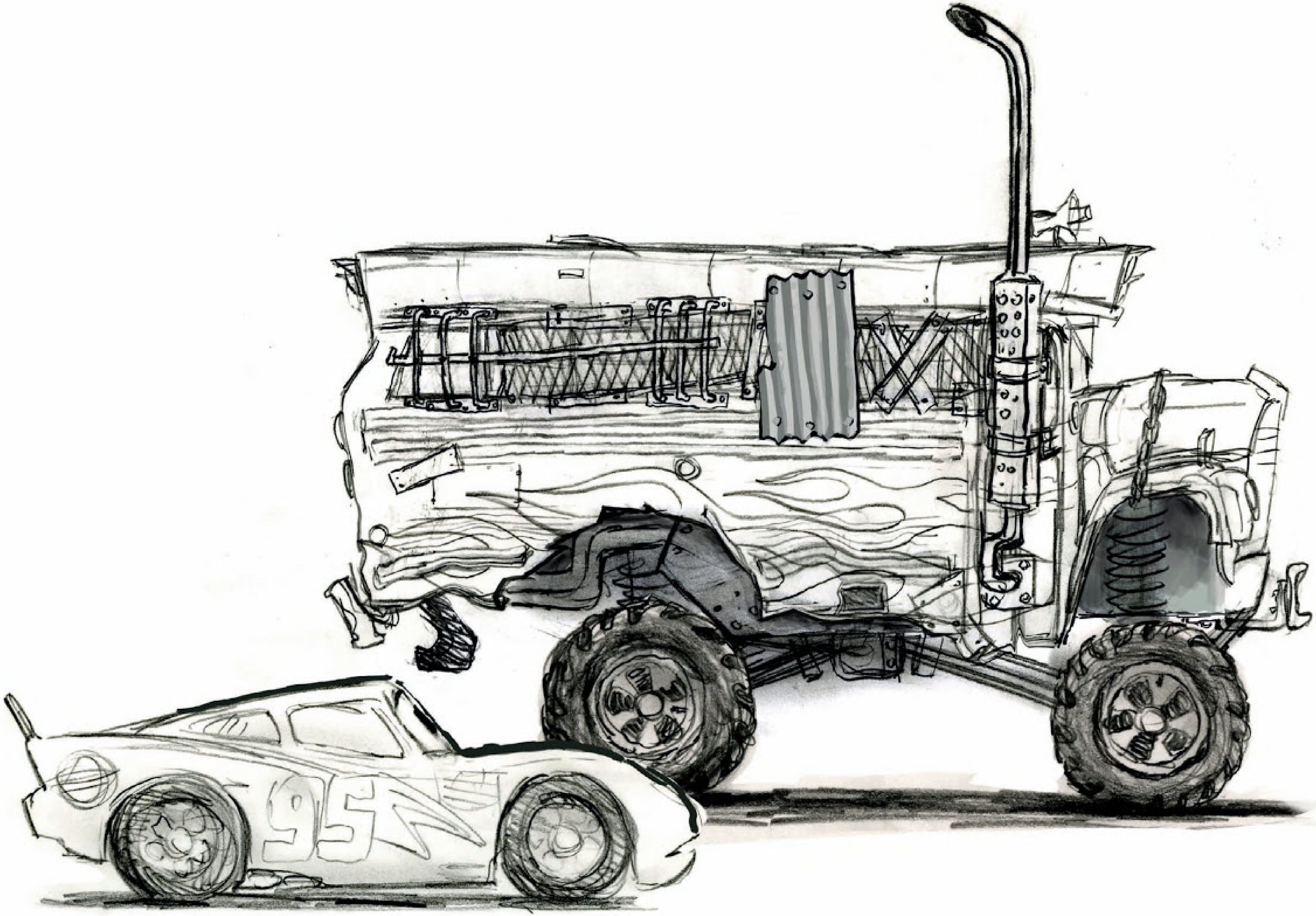


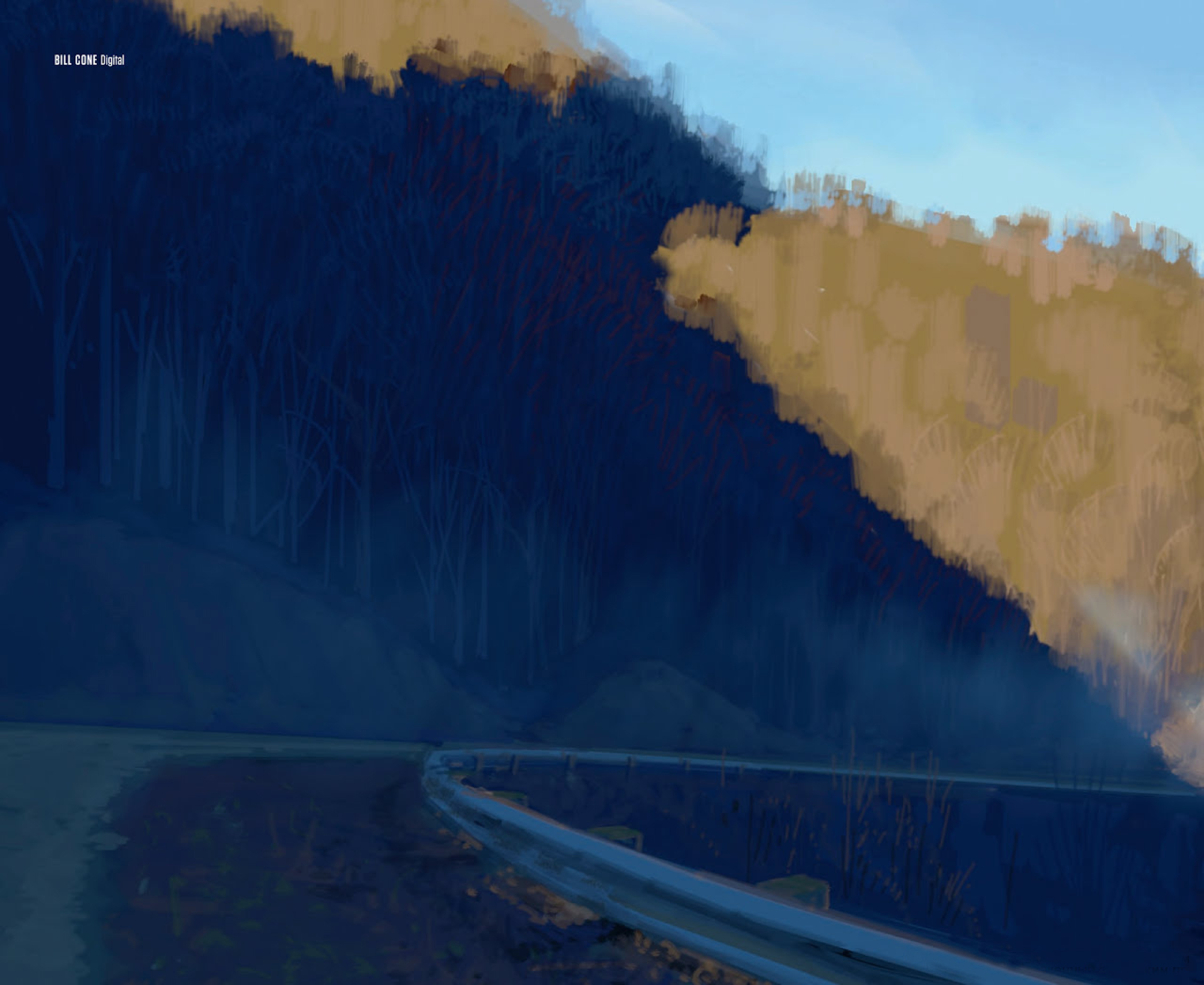


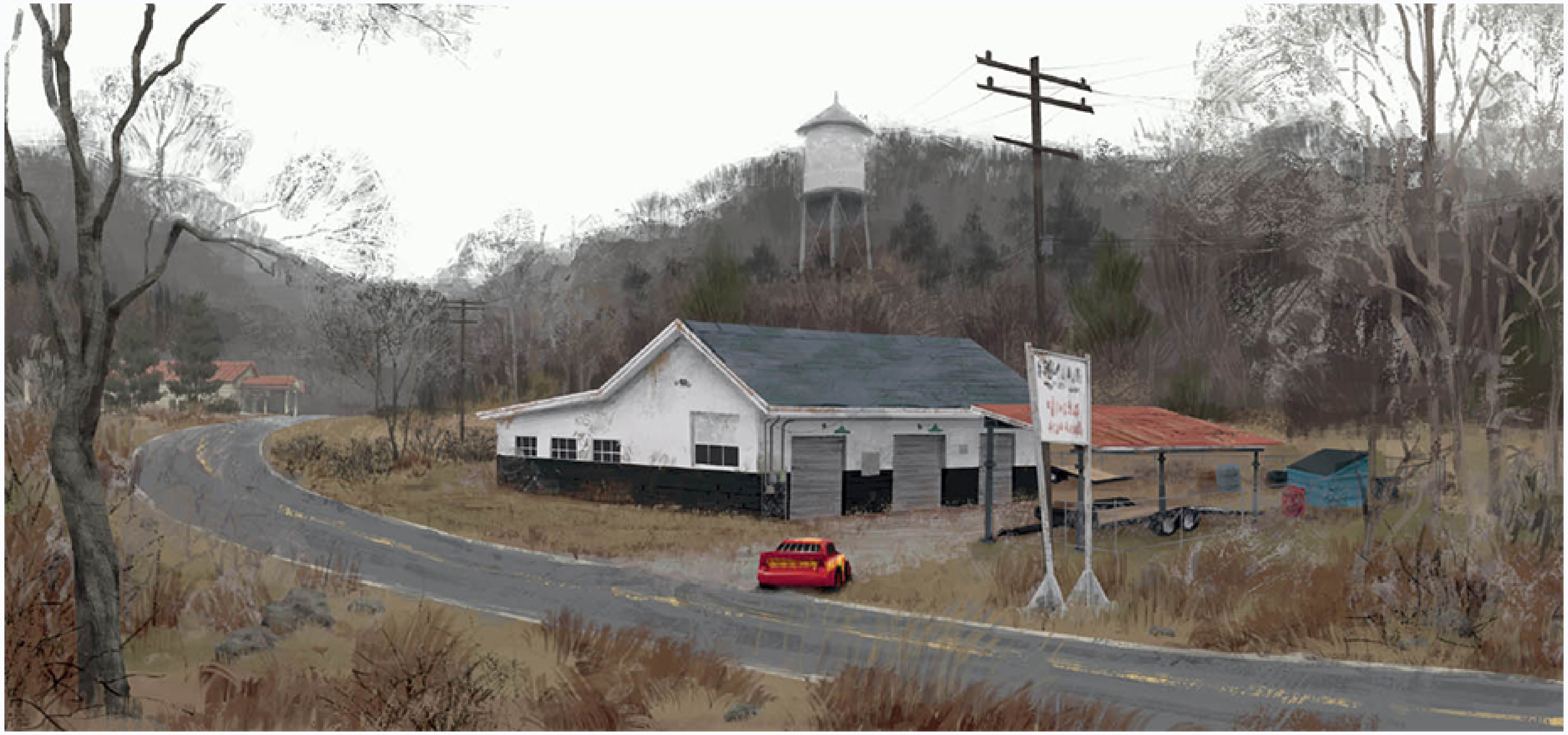

SCHOOL BUS
STOP
58

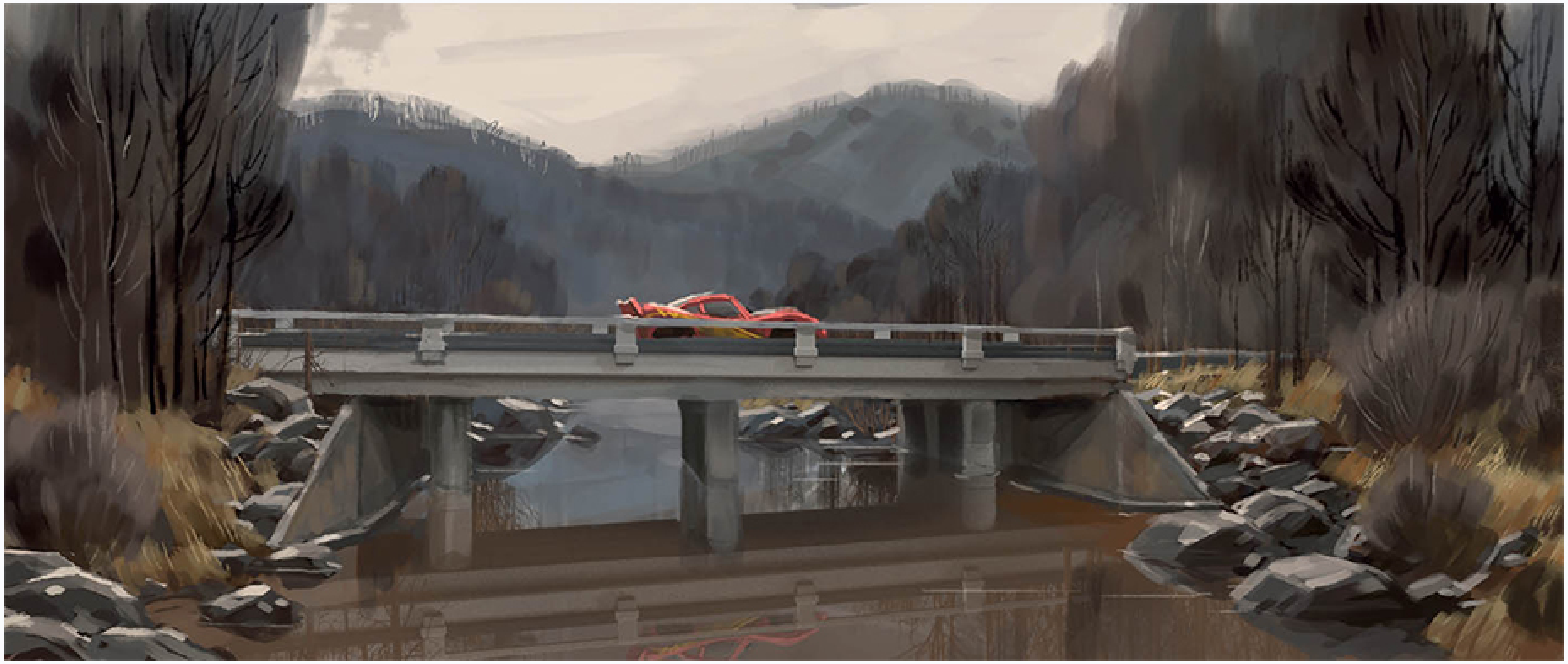

FRITTER TIME
30

(left) **MATT NOLTE** pencil and marker, (right) Model by **SAL MELUSSO**, Shading by **LAURA PHILLIPS**, (above) **GRANT ALEXANDER** Digital, (opposite) **MATT NOLTE** pencil

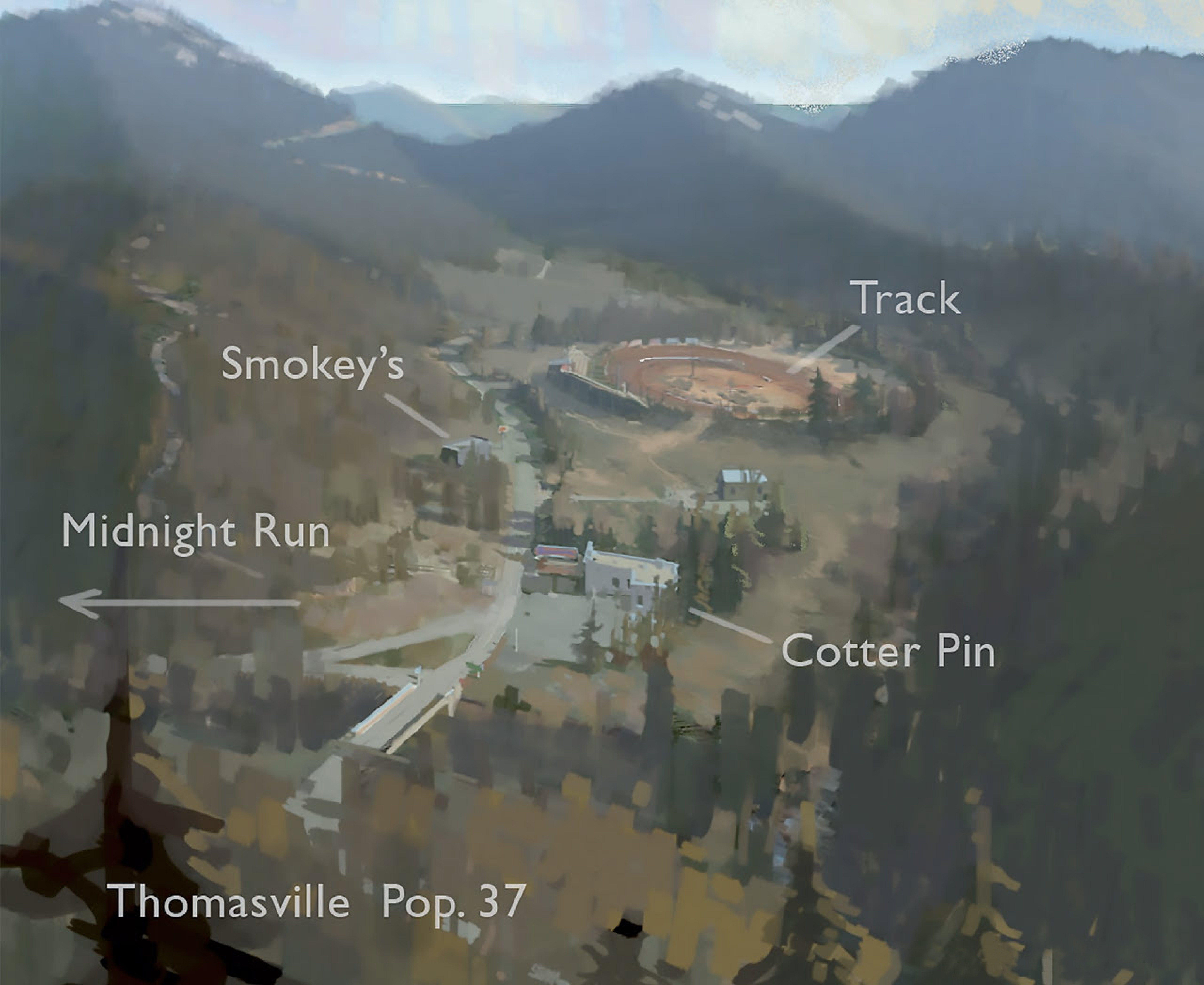

95

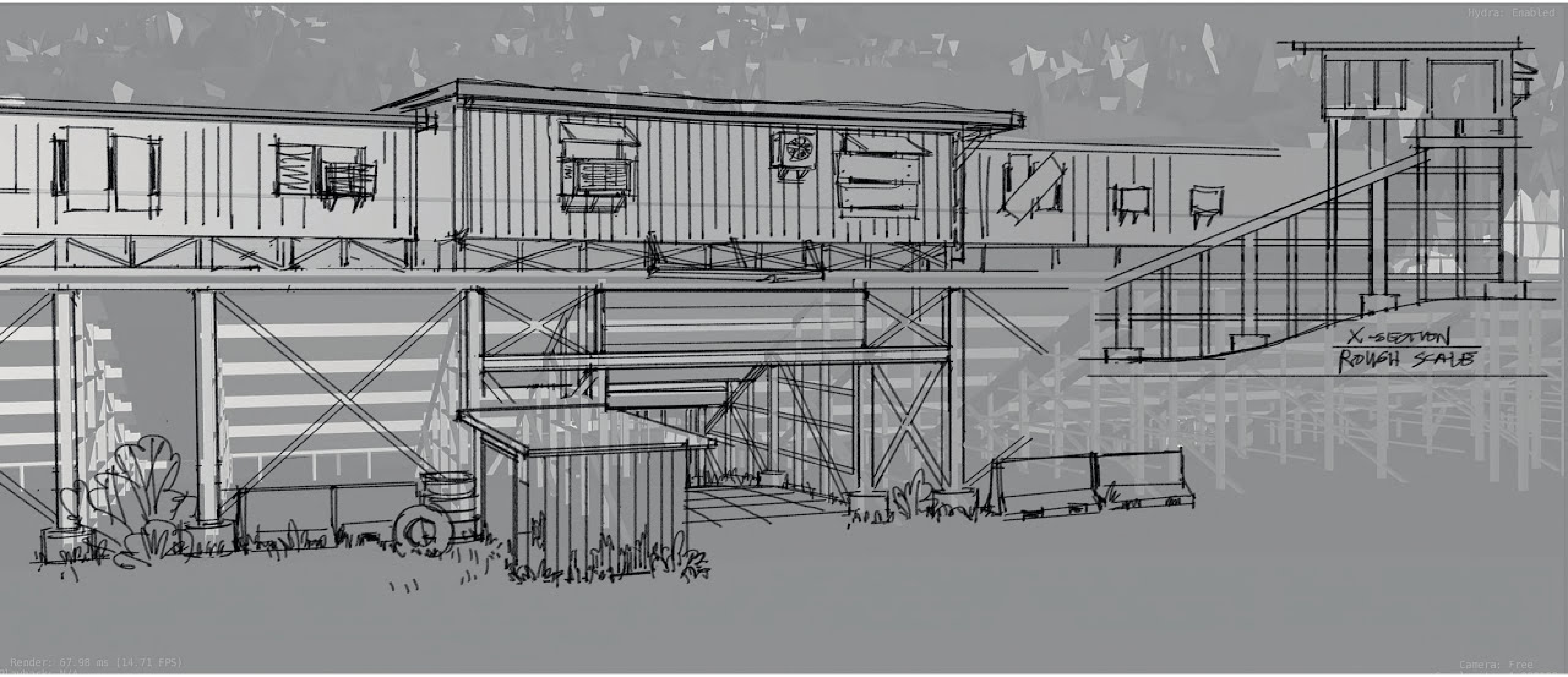






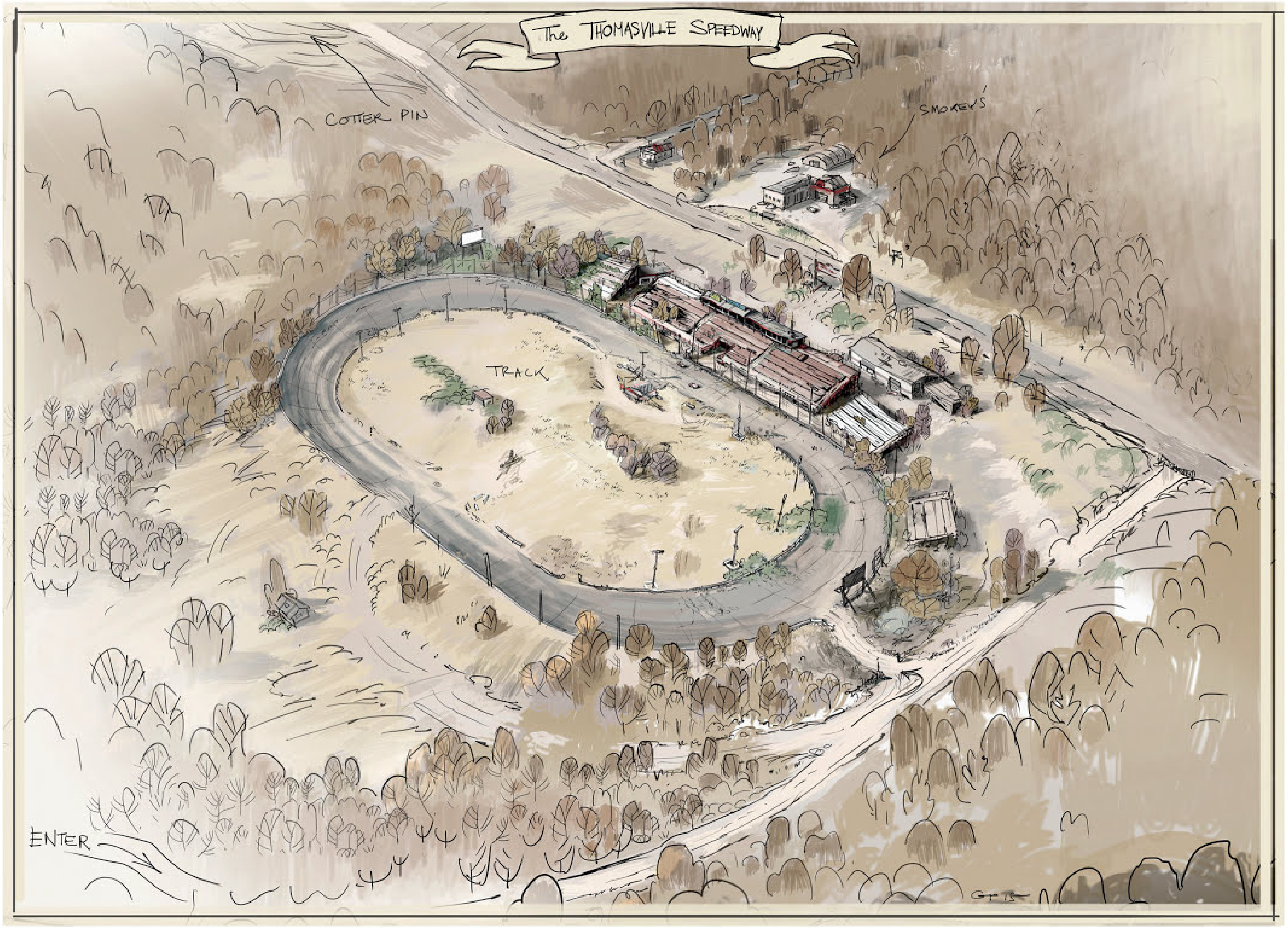
(top) **PAUL ABADILLA** Digital, (bottom) **PAUL ABADILLA** Digital


Track
Smokey's
Midnight Run
Cotter Pin
Thomasville Pop. 37

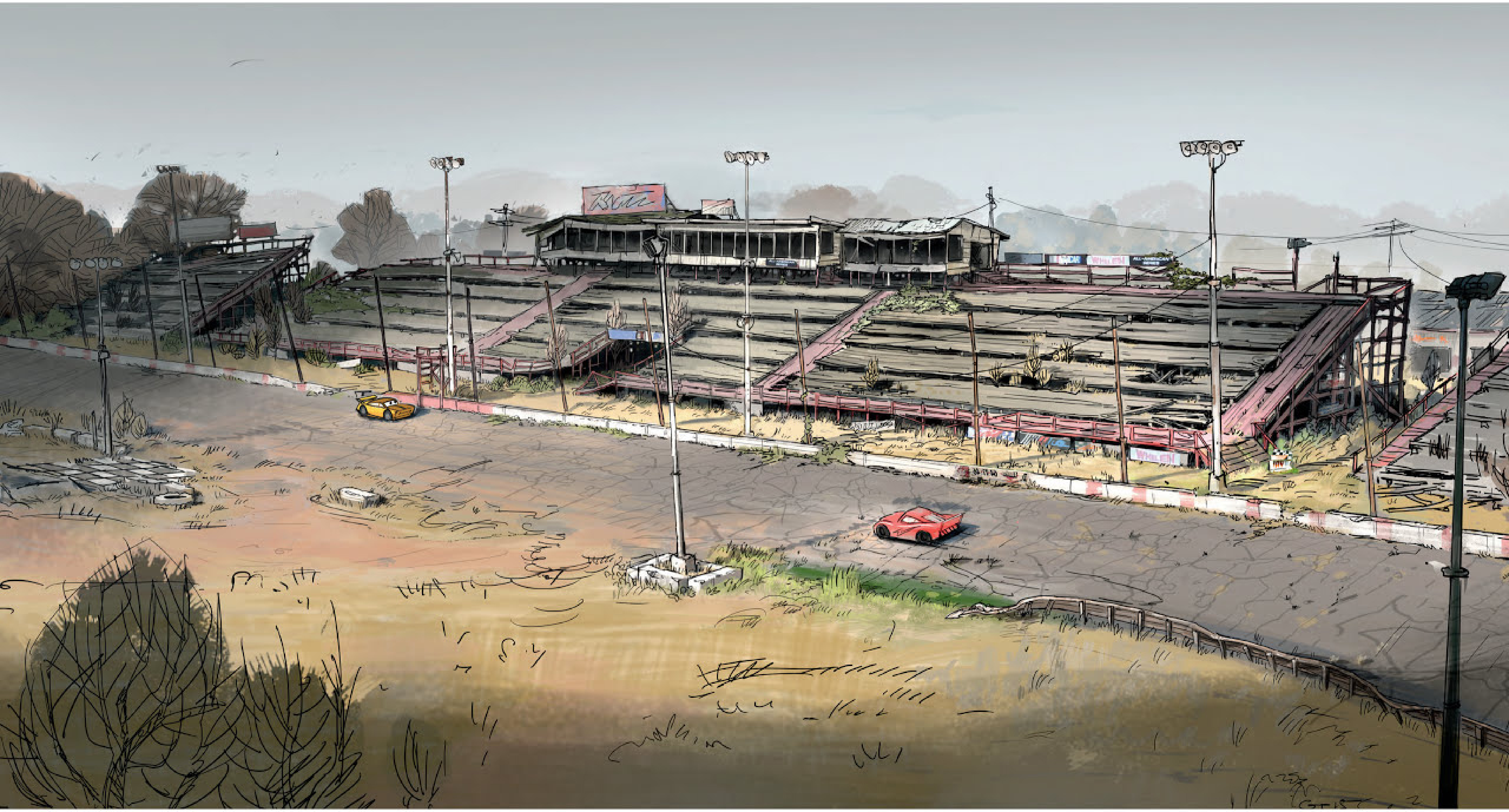

Hydra: Enabled
X-SECTION
ROUGH SCALE
Render: 67.98 ms (14.71 FPS)
Camera: Free

In our research, we wandered the back roads of North Carolina in search of authenticity and truth in the roots of racing. Our road gave way to the beautiful ruins of the Occoneechee Speedway, one of NASCAR's first two tracks in their inaugural 1949 season, and the North Wilkesboro Speedway—both abandoned, but filled with wonder. These would serve as the perfect jumping-off point in developing the aesthetic of Doc Hudson's home track. We wanted to evoke the feeling of old high school football games long forgotten, the "spirit of the game" still alive in every fallen brick and weathered board.

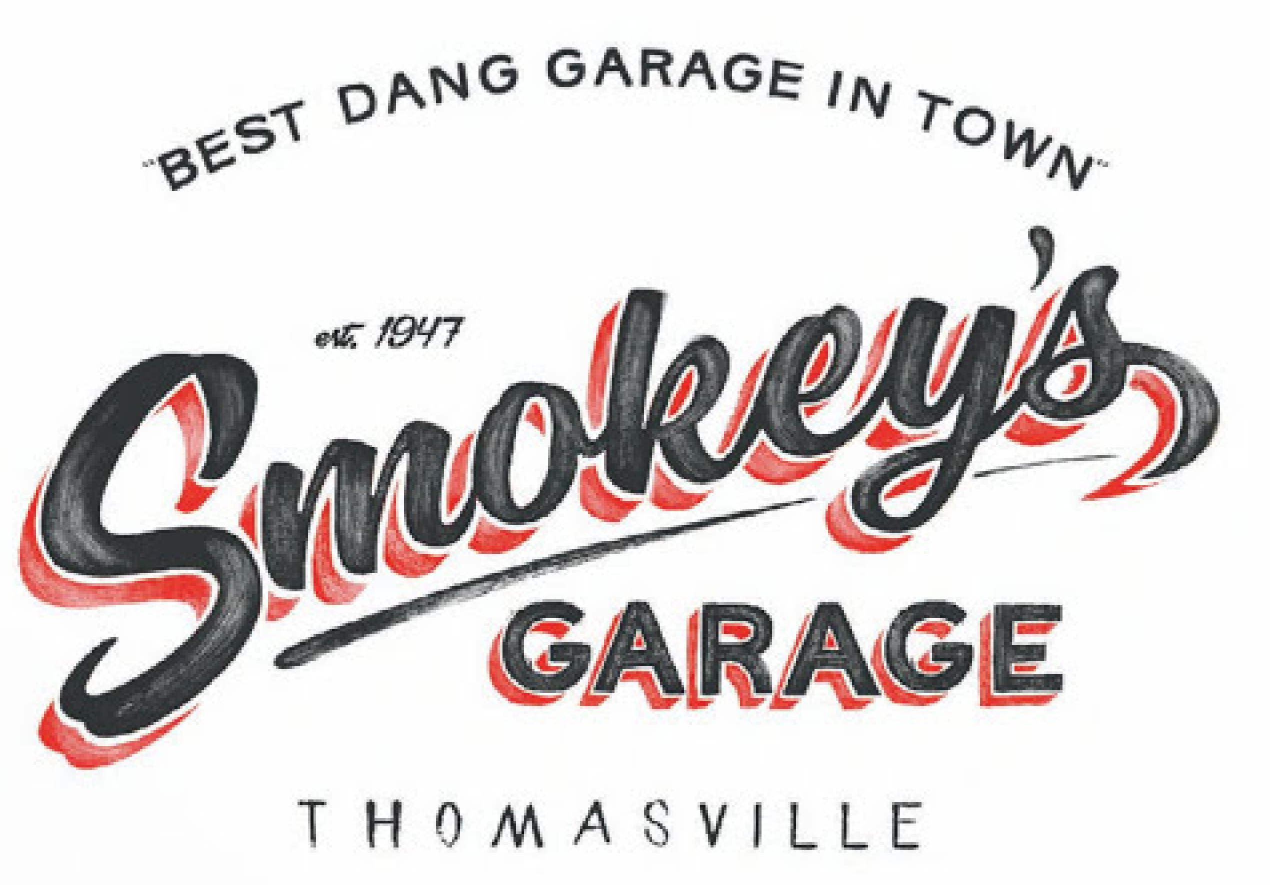
—**SCOTT MORSE**, Story Supervisor

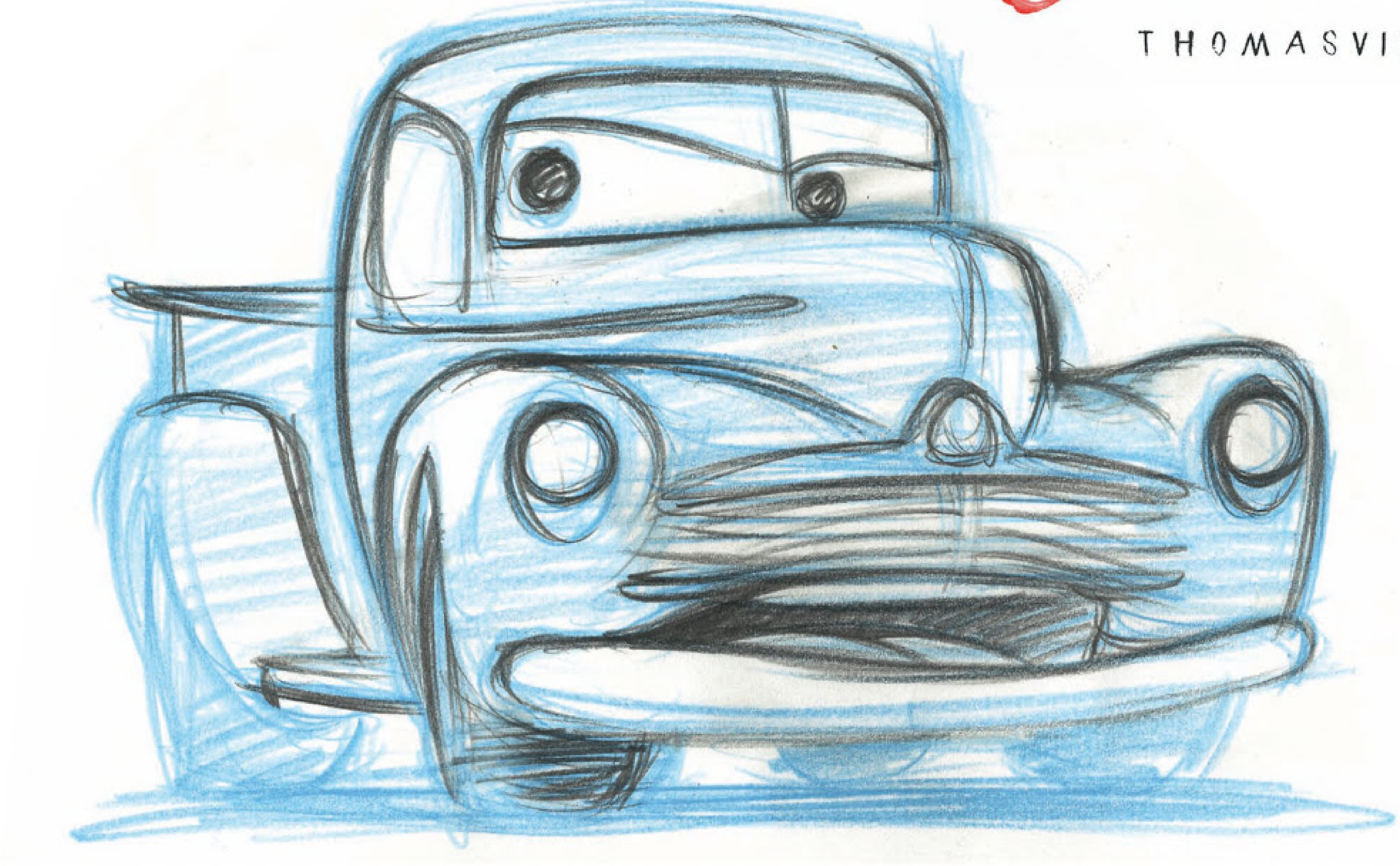

The THOMASVILLE SPEEDWAY
COTTER PIN
SMOKEY'S
TRACK
ENTER

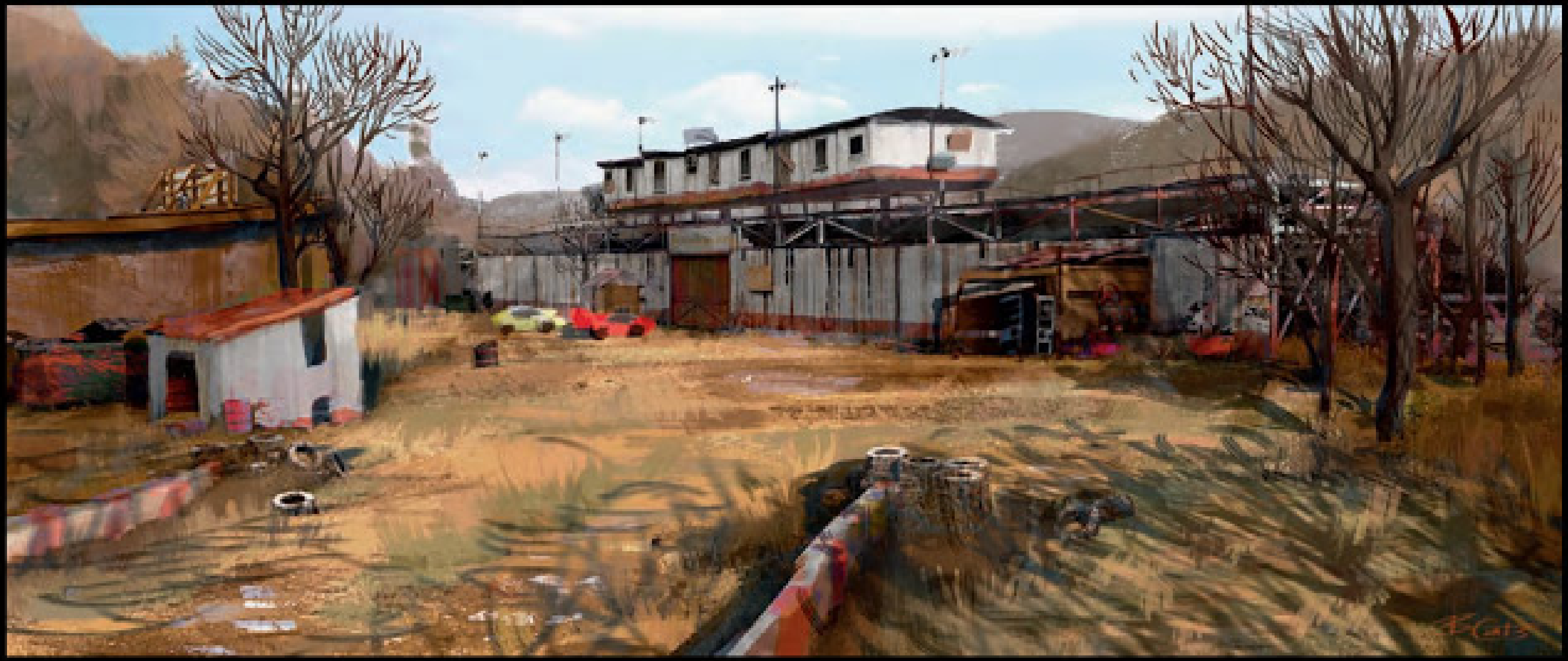
Design by **PAUL ABADILLA,** Model by **IVO KOS;** (opposite) **GARRETT TAYLOR** Digital

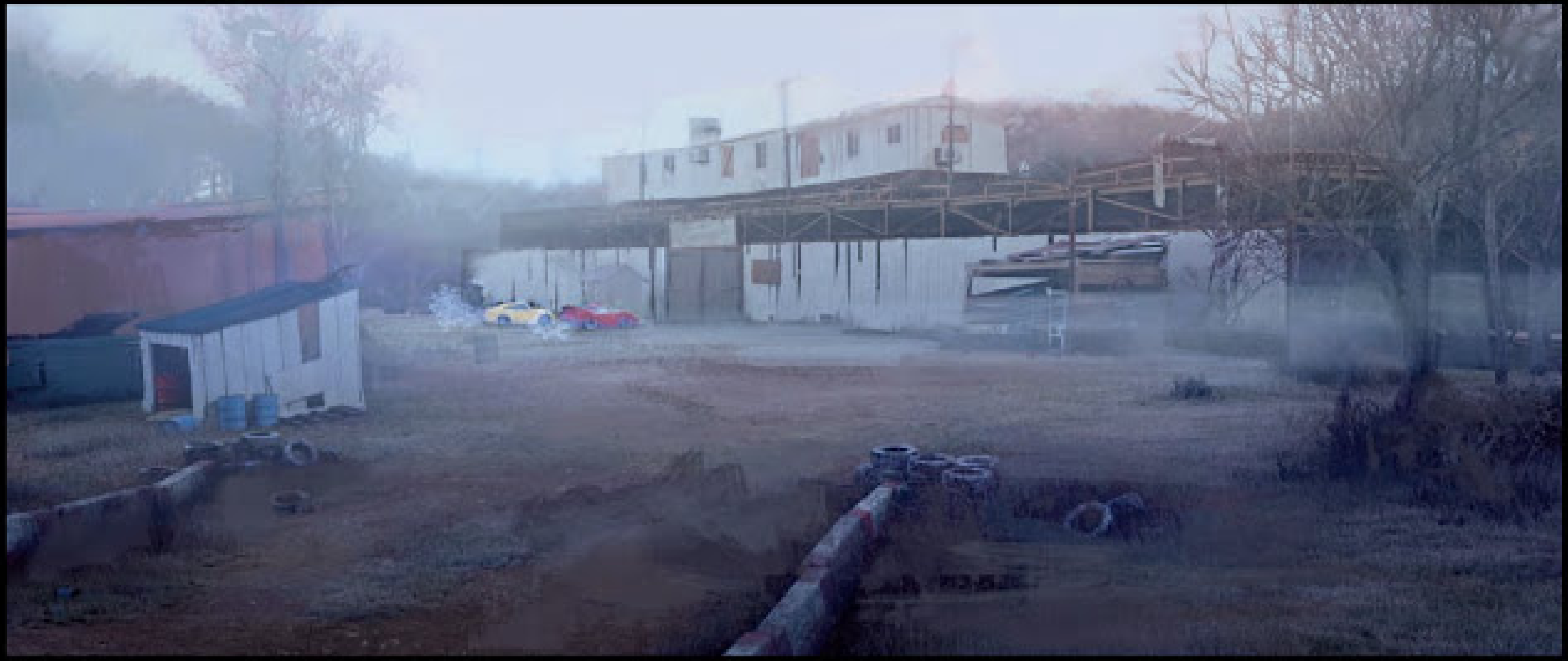


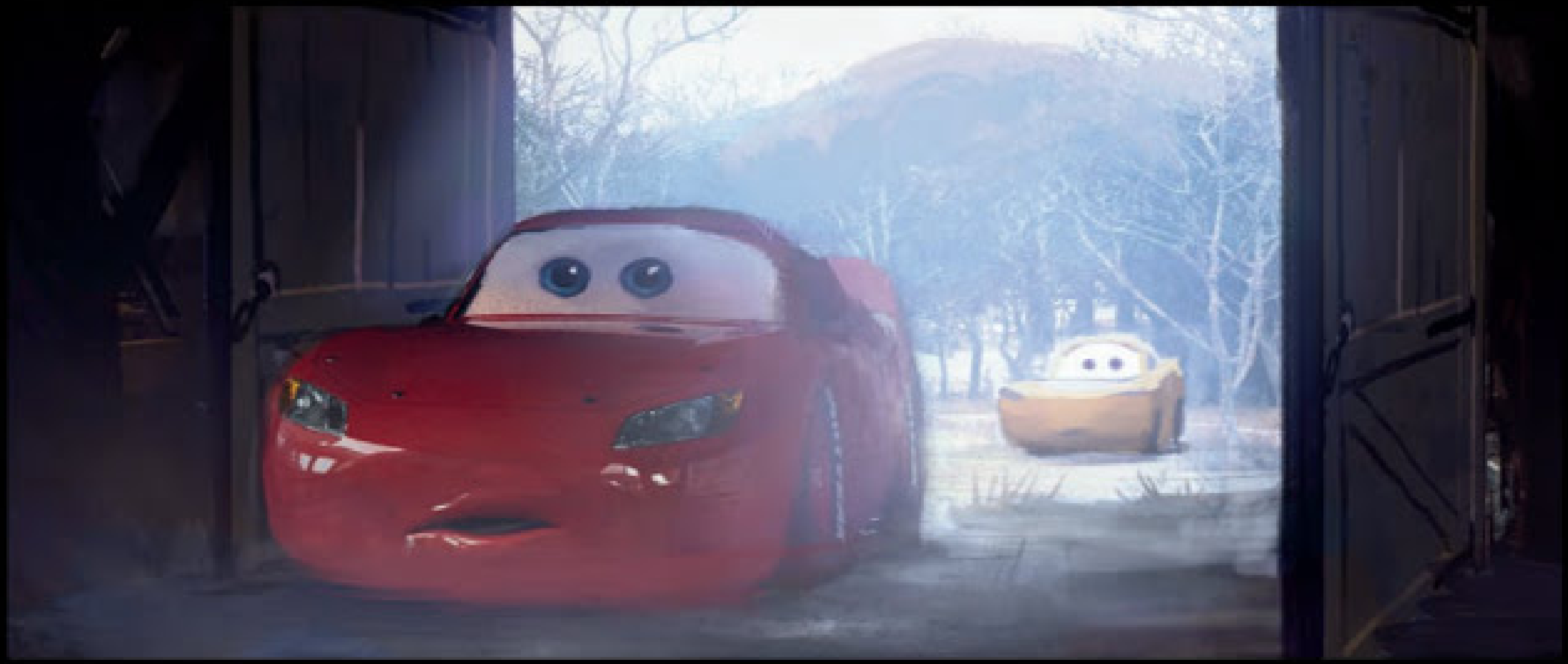
SMOKEY


"BEST DANG GARAGE IN TOWN"
est. 1947
Smokey's
GARAGE
THOMASVILLE

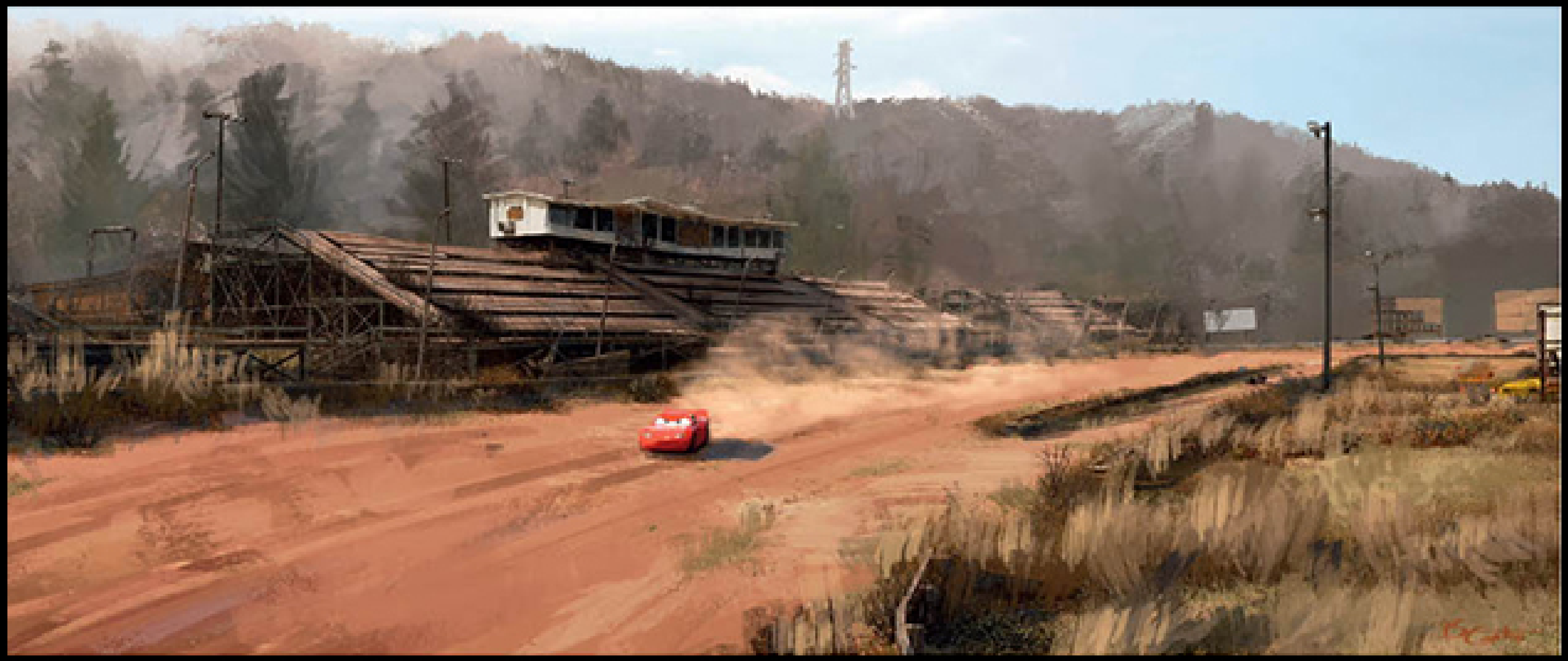


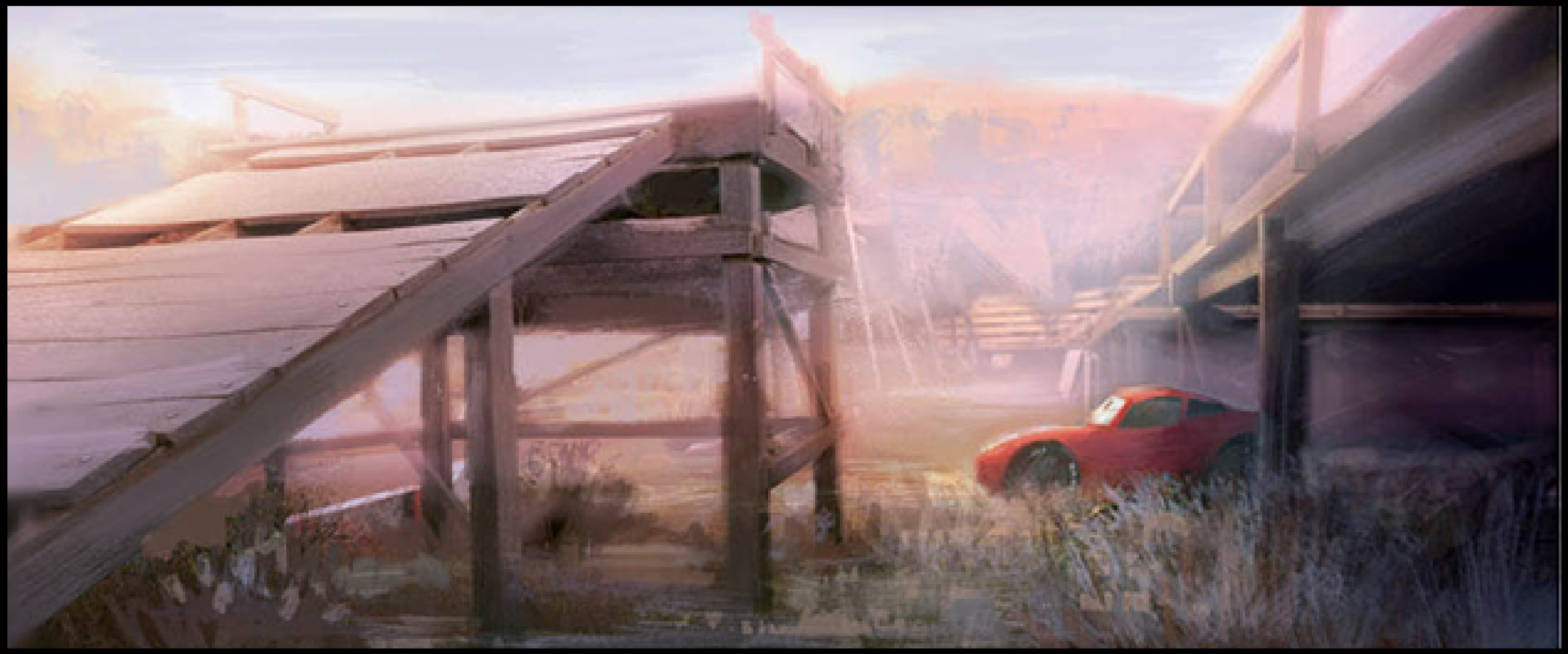


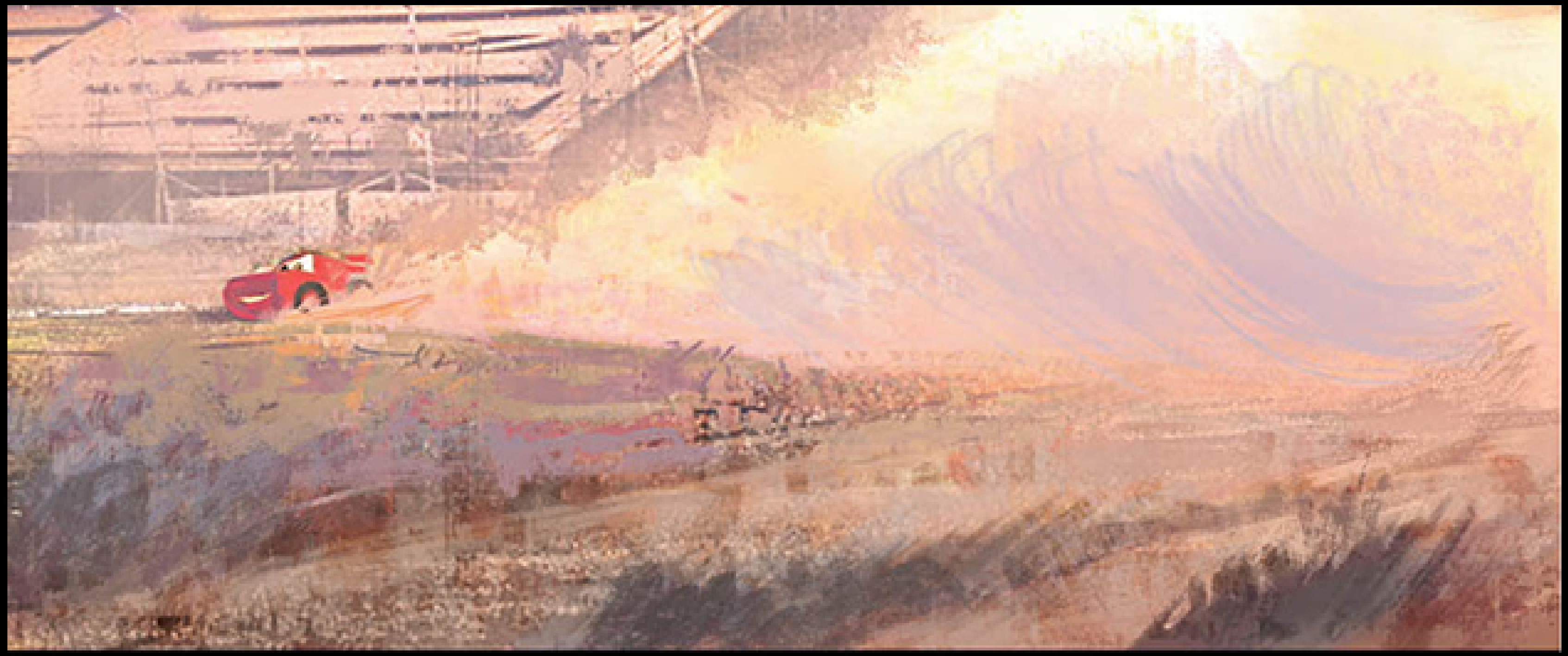


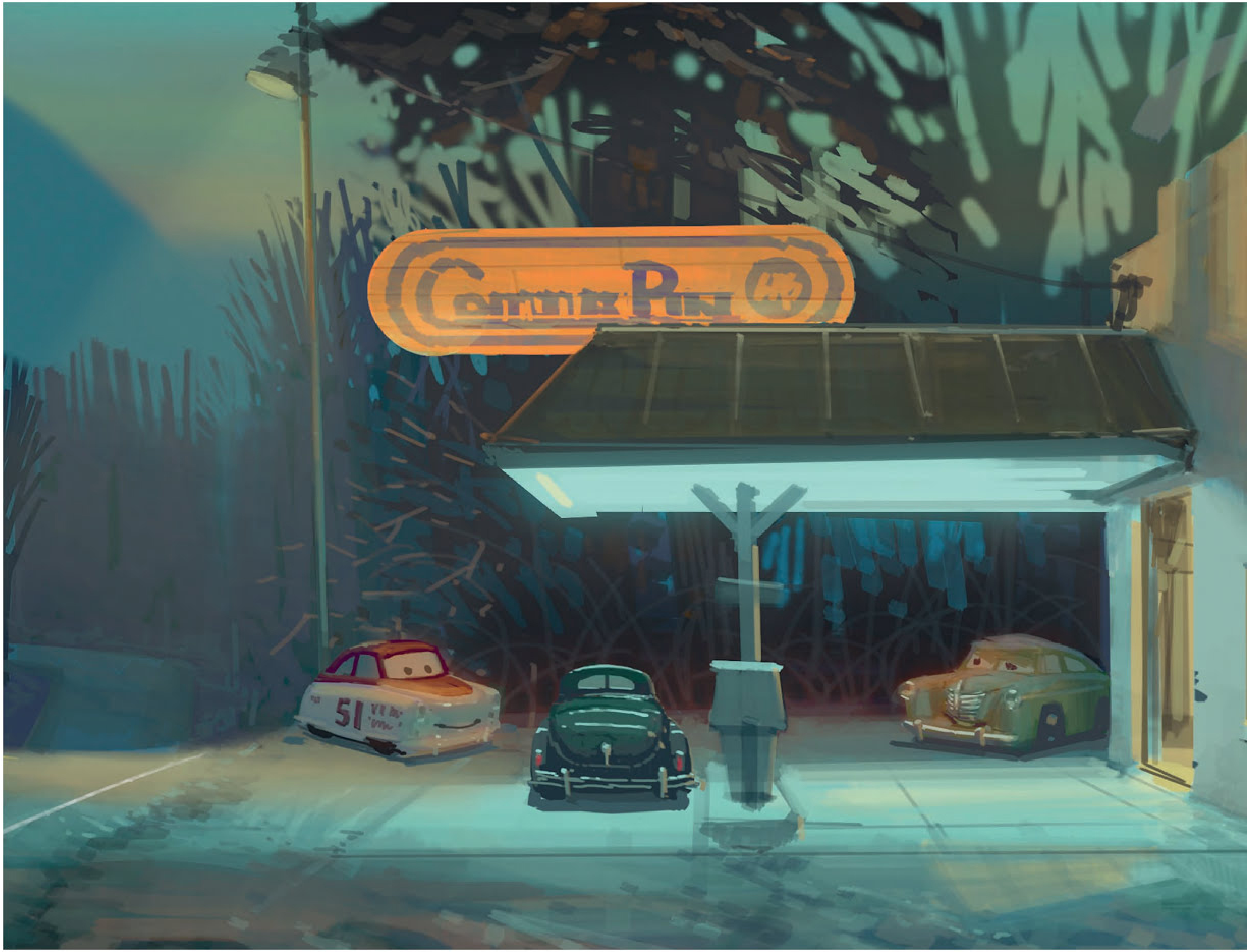


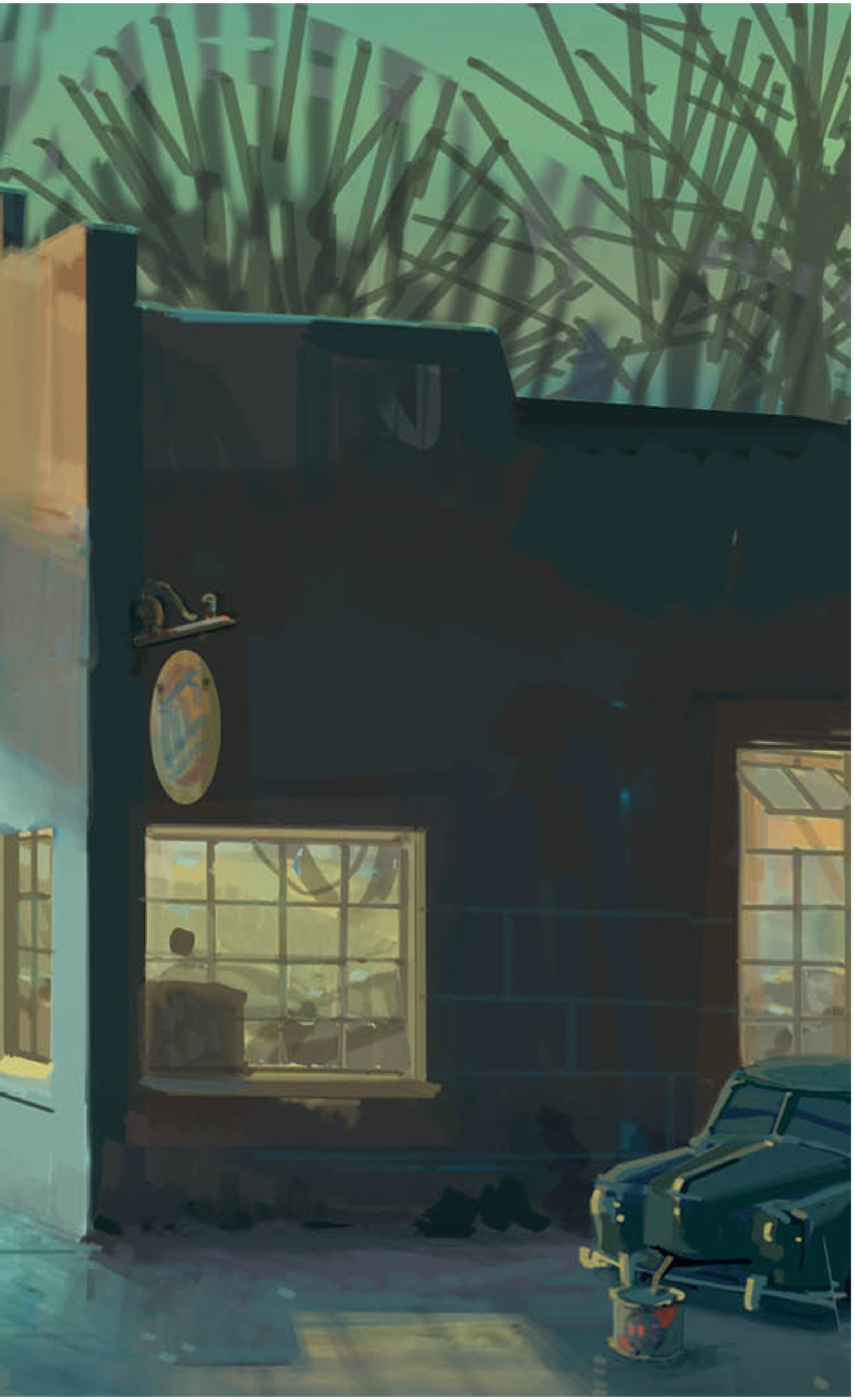
(top row) **BRANDON COATES** Digital; (center and bottom rows) **DREW HARTEL** Digital

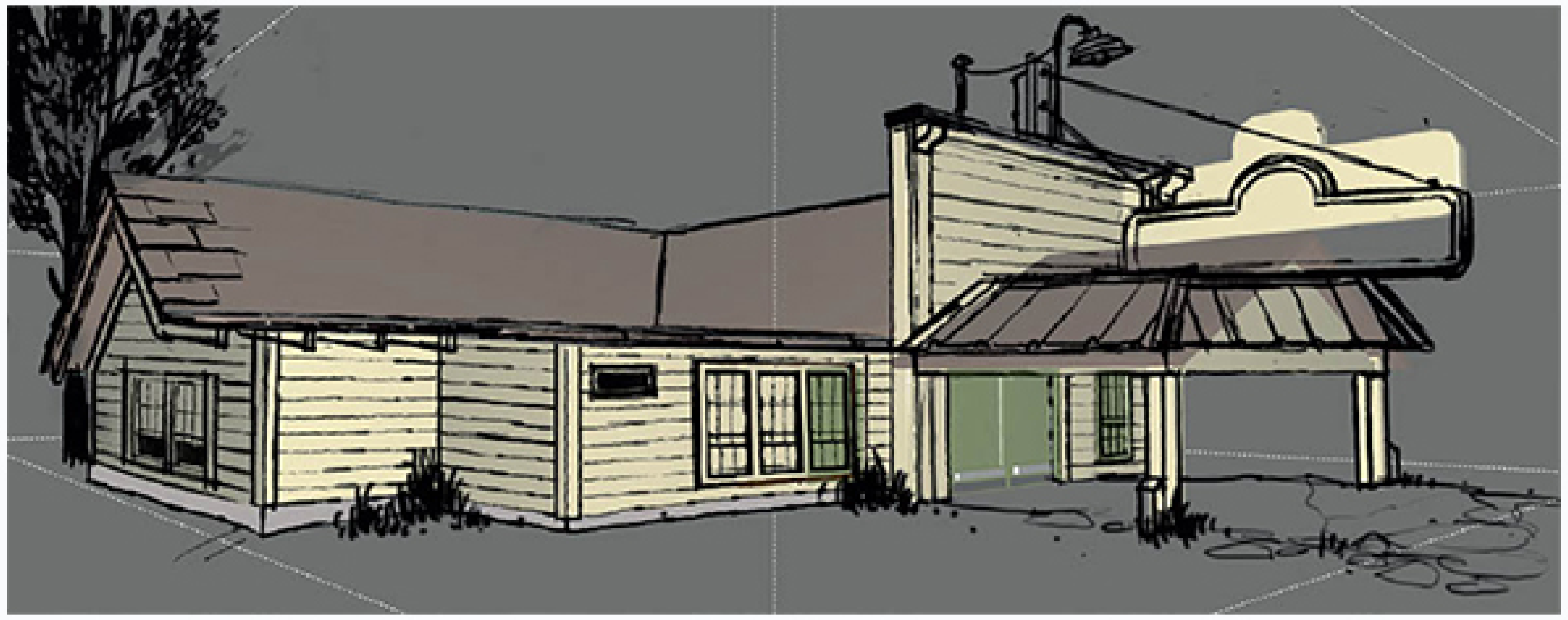


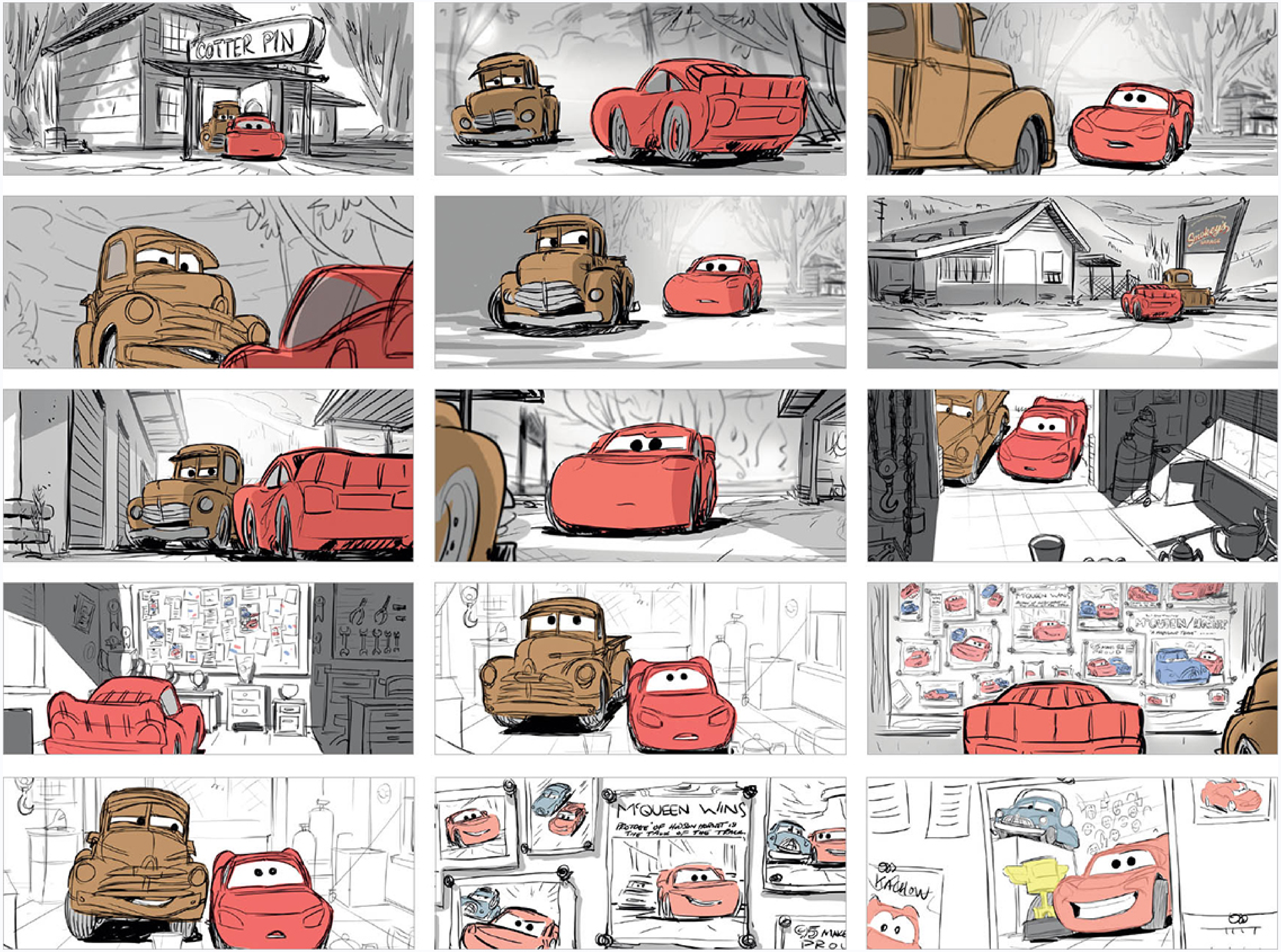





51

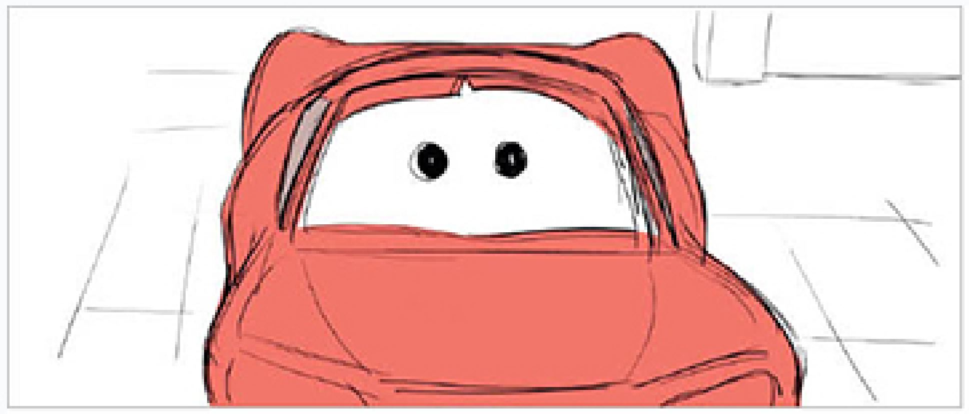
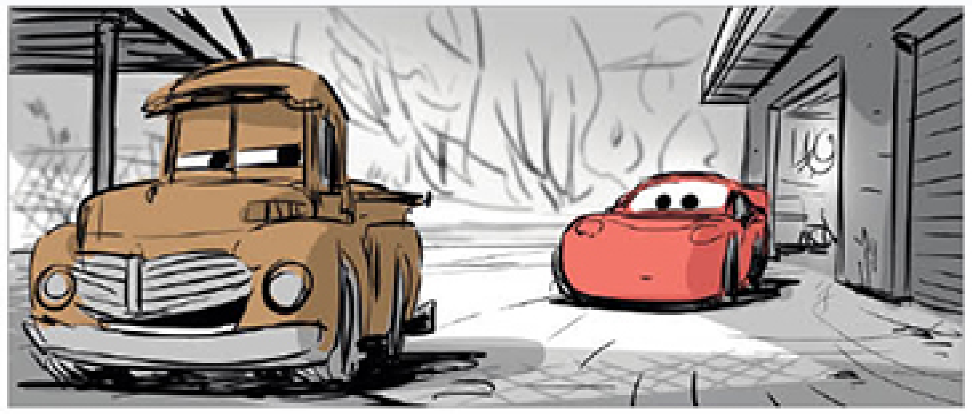
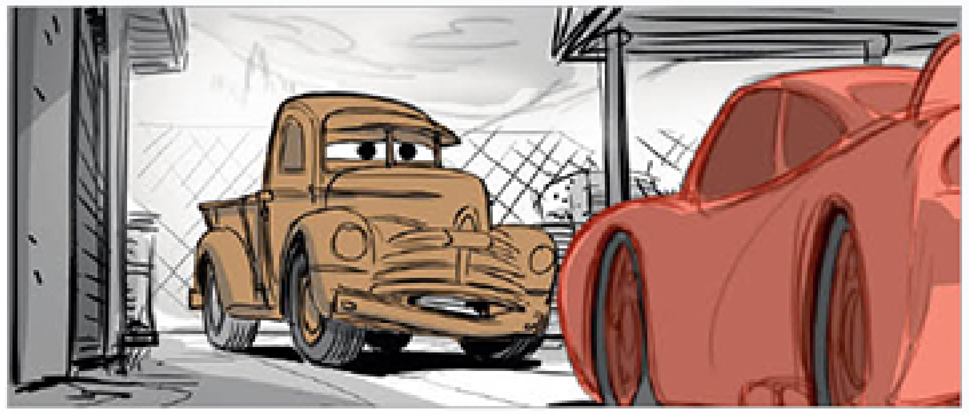
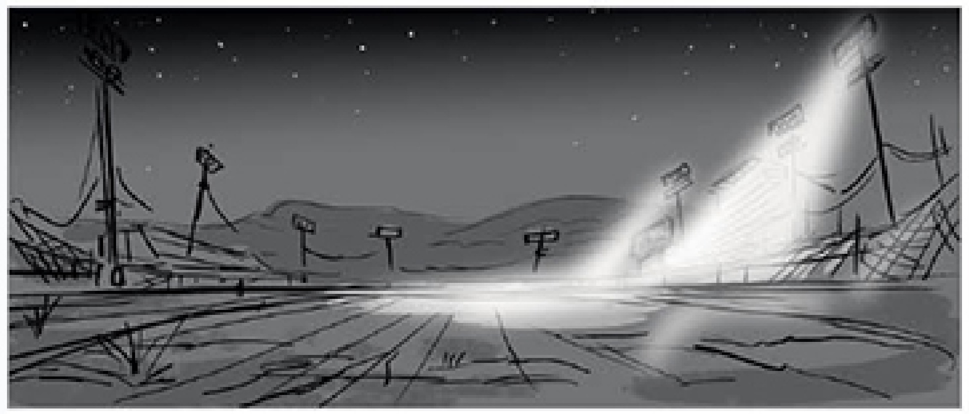
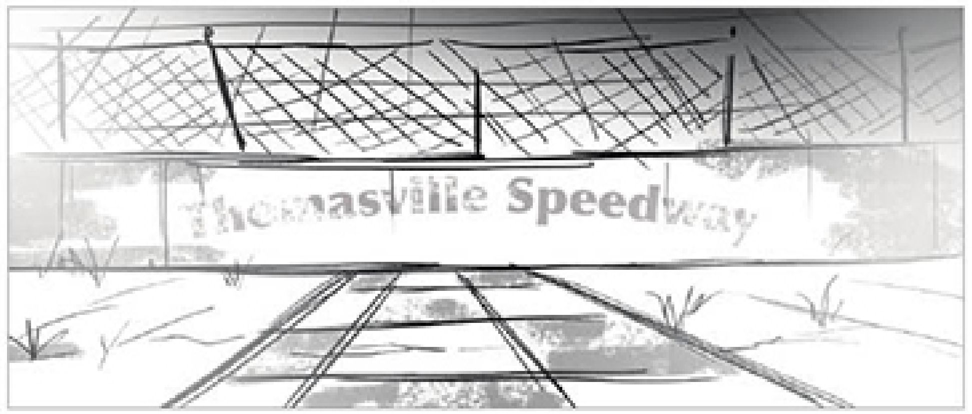


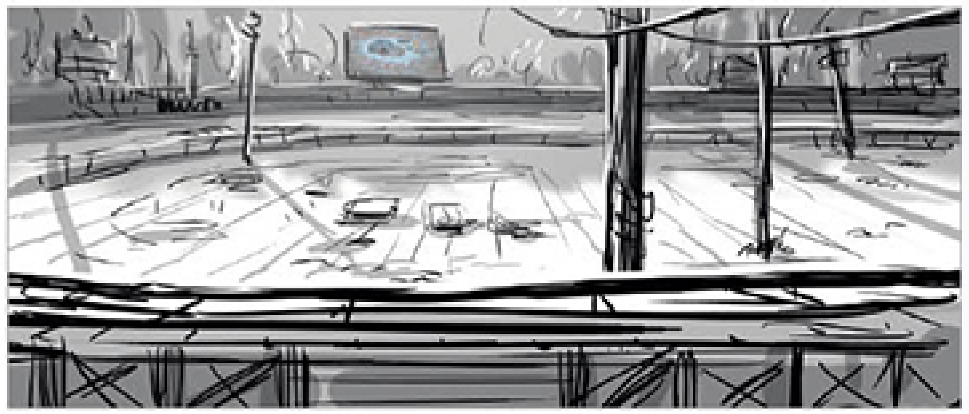
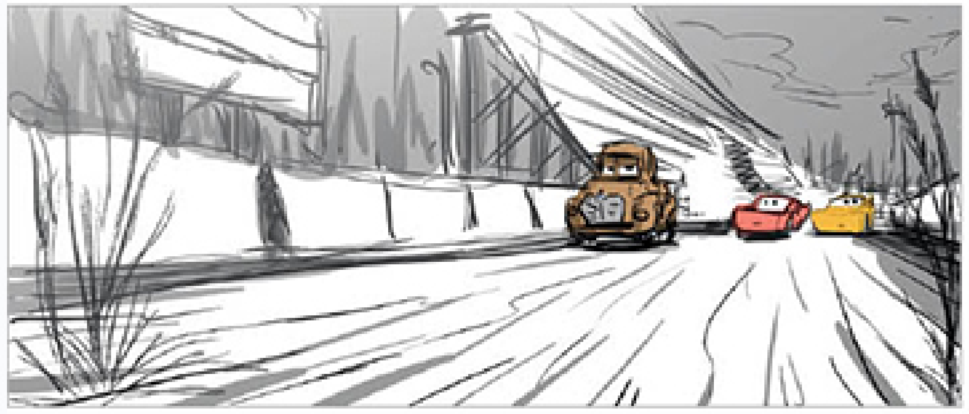
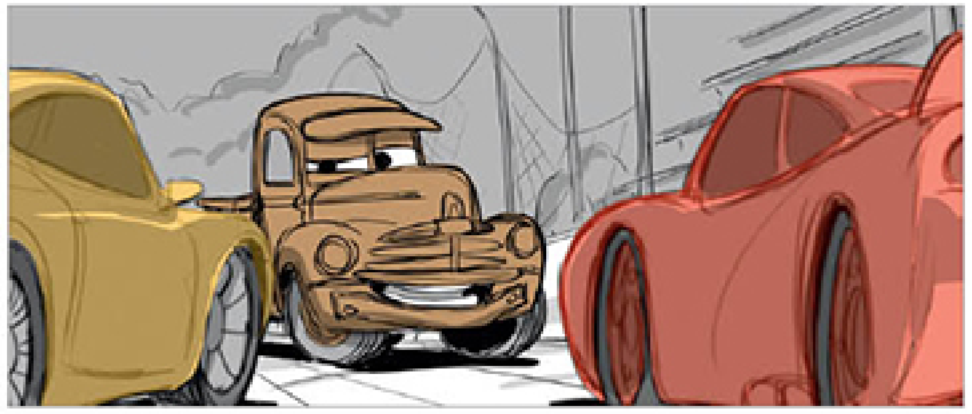
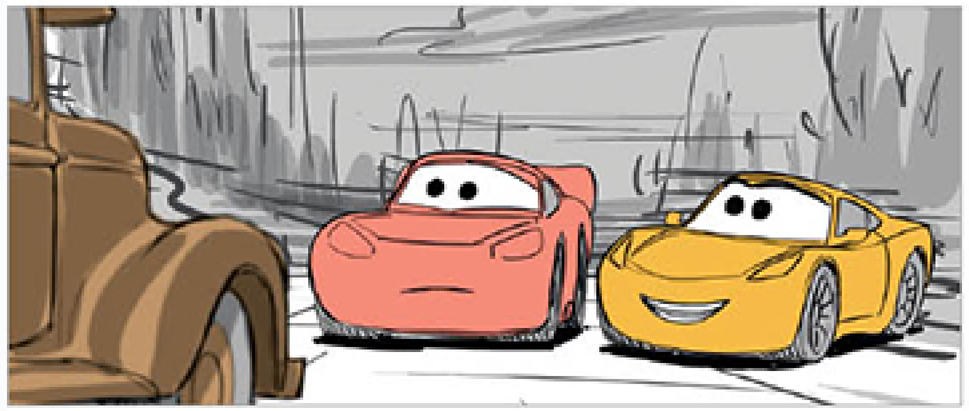
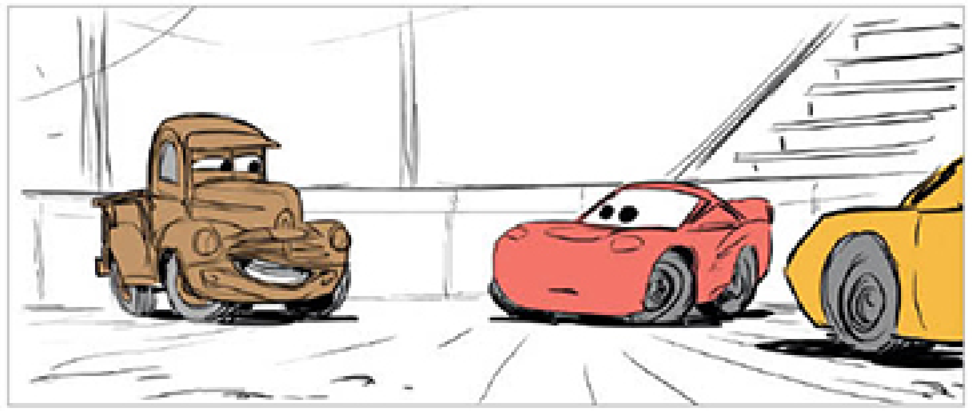
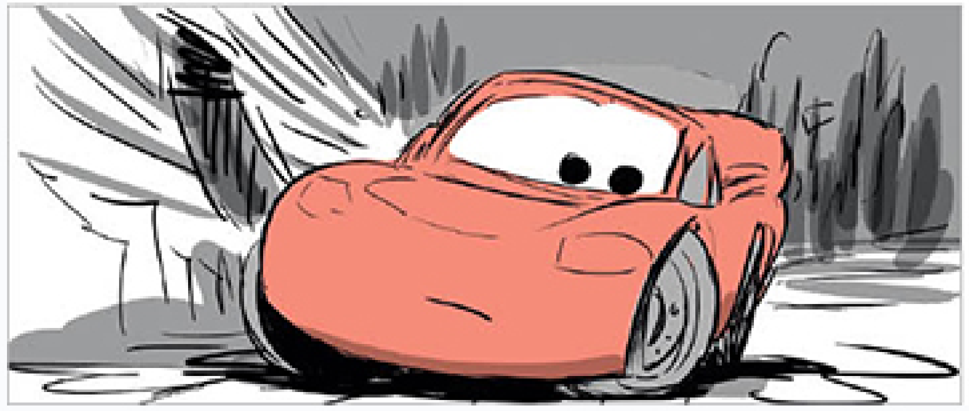
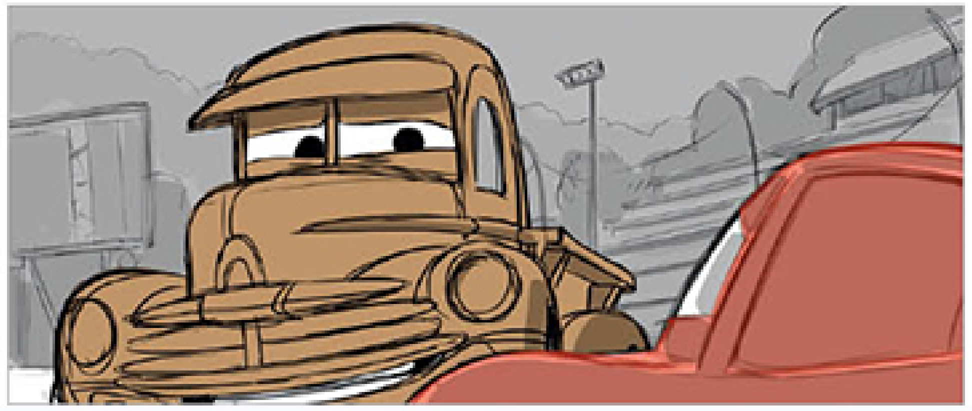



COTTER PIN
Smokey's
McQUEEN WINS
PROTOGE' OF HUDSON HORNET IS THE TALK OF THE TRACK
KACHOW

SCOTT MORSE, XAVIER RIFFAULT, REJ BOURDAGES AND MICHAEL DALEY Storyboards

JP VINE, REJ BOURDAGES, CHRISTIAN ROMAN Storyboards, (opposite) **JP VINE, REJ BOURDAGES, MICHAEL YATES, CHRISTIAN ROMAN** Storyboards

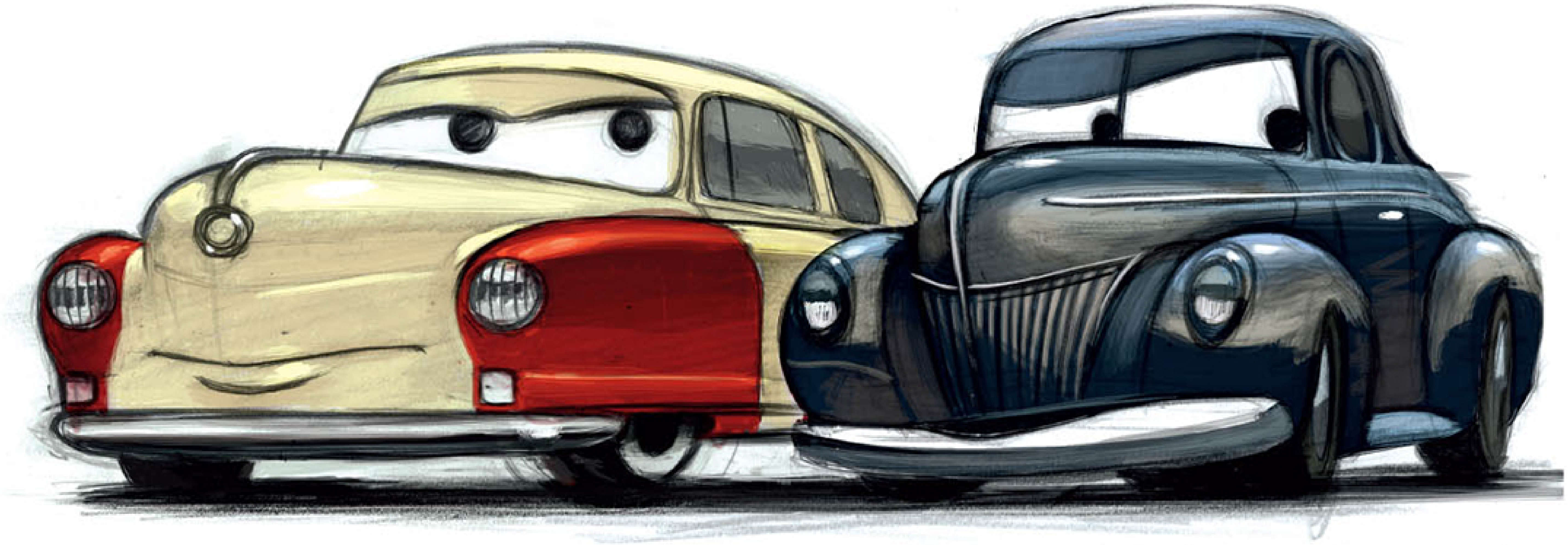








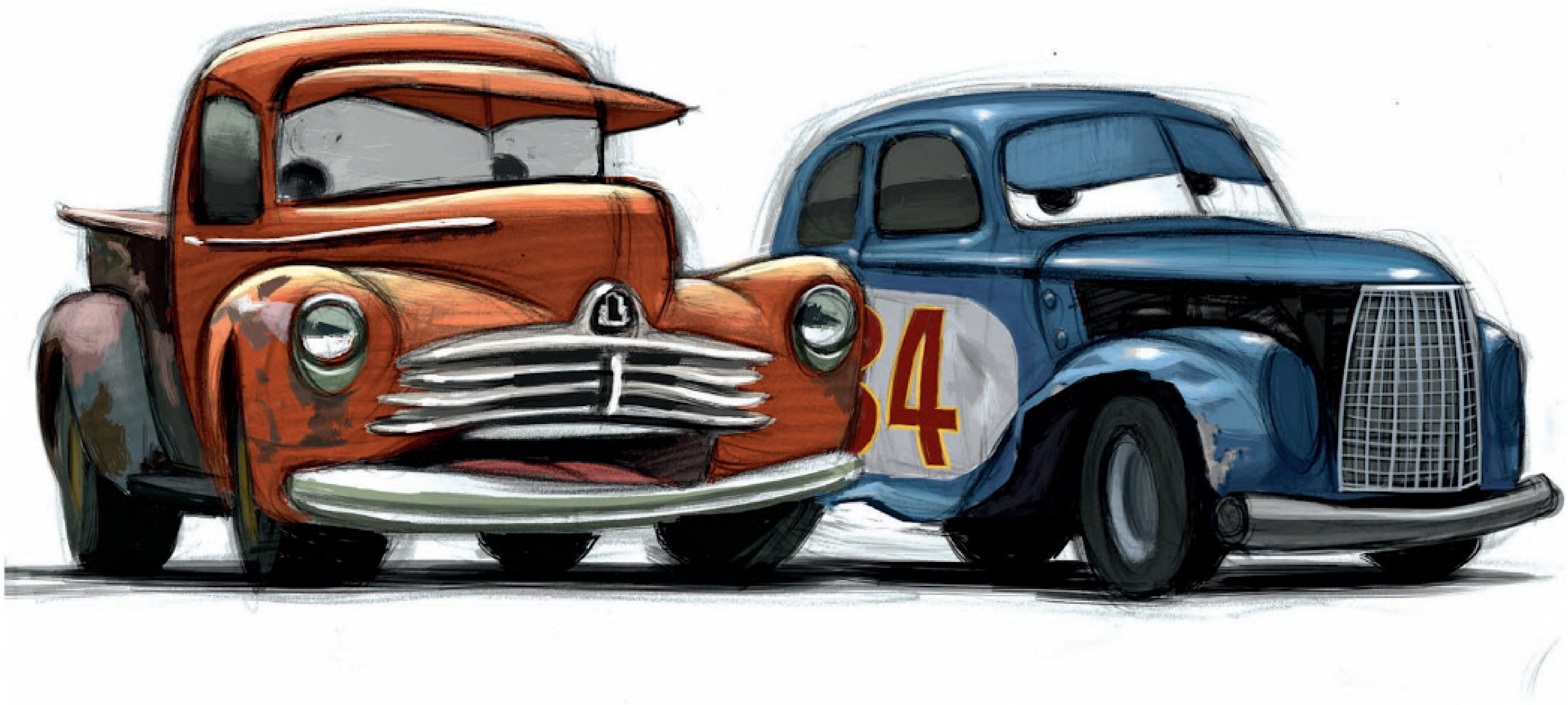
IT'S OVER

As often happens after a few screening, changes can be called on existing sequences to reflect new dialigue in the script. Having the benefit of strongly, established staging great design, and the ability to lean on the voice actor's past performances for their emotional range, frees you to dedicate more time and effort in the drawing and acting of the scene. Everything from rhe previous versions that still works will remain, while you can enjoy posing out the subtleties of your character's moment. as you would imagine them going through their own conflicts. The reward is to see your boards cut with the final dialogue, and how close your acting comes to match and support the actor's choices.

-XAVIER RIFFAULT, Story Artist

LEGENDS





JOHN LEE Digital

Designing our Legends brought on challenges that were different from our contemporary characters, because they were inspired by both vehicles and real life personalities.

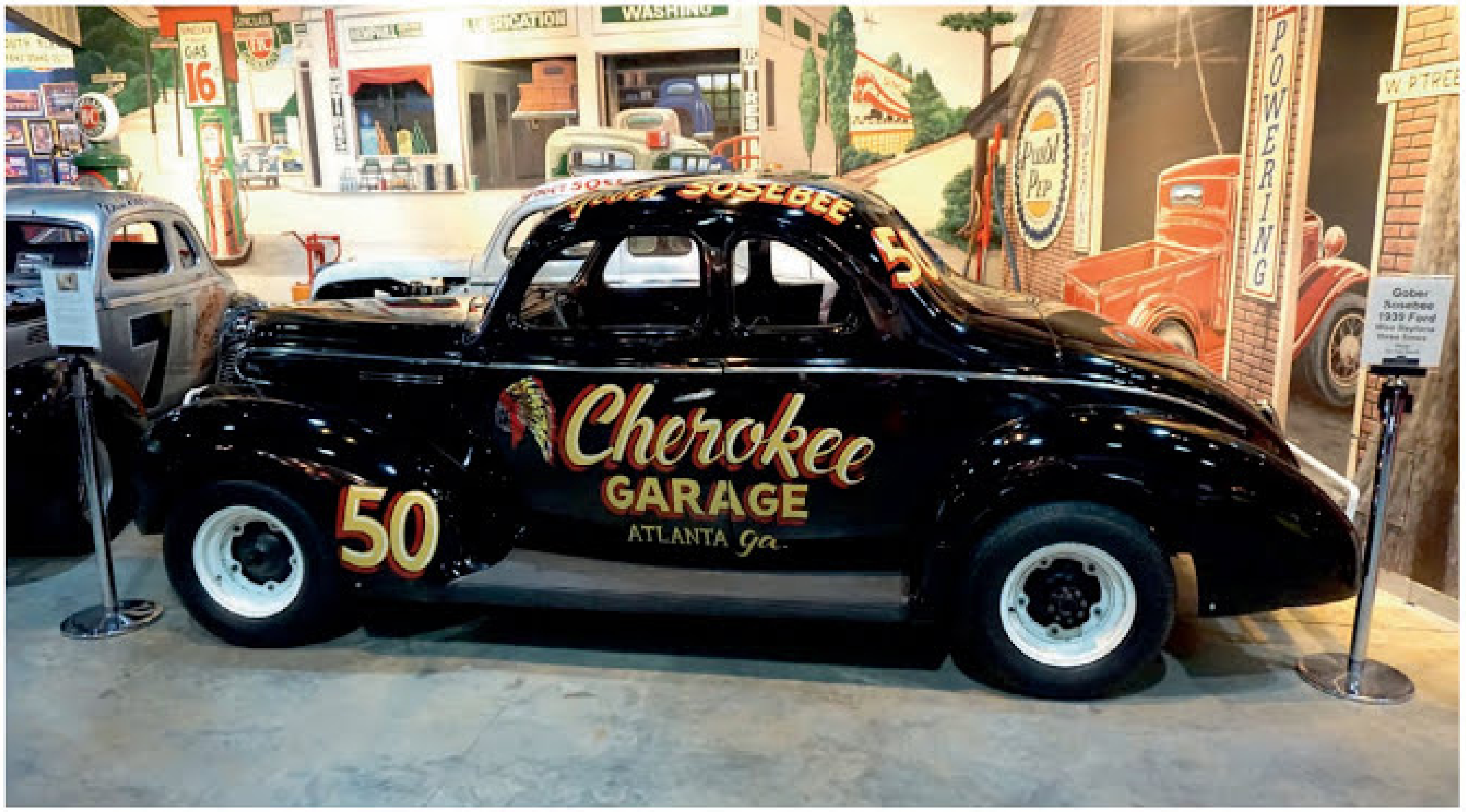
Hours of research into the roots of stock car racing and its heroes was a big part of the design process. The goal was to make our Legends fit into the world of *Cars*, while at the same time staying true to the pioneers of this sport.

—**JOHN LEE,** Character Artist

As the story of *Cars 3* developed, we knew there would be a moment that Lightning McQueen might meet some of Doc's racing contemporaries. These Legends were the friends and competitors of the Hudson Hornet in the early '50s, in the pioneering days of stock car racing. This gave us the opportunity to pay homage to some of the real legends of NASCAR: Louise Smith (Louis Nash), "the first lady of racing," known for her fearless style on the track. Wendell Scott (River Scott), the first African American racer in NASCAR and the first to win in the Grand National Series, and Junior Johnson (Junior Moon), who is a legend in racing for his 50 NASCAR wins, known for his tenacity both on and off the track. We actually met Junior on one of our research trips to North Carolina and just knew that he had to be a part of the Legends group.

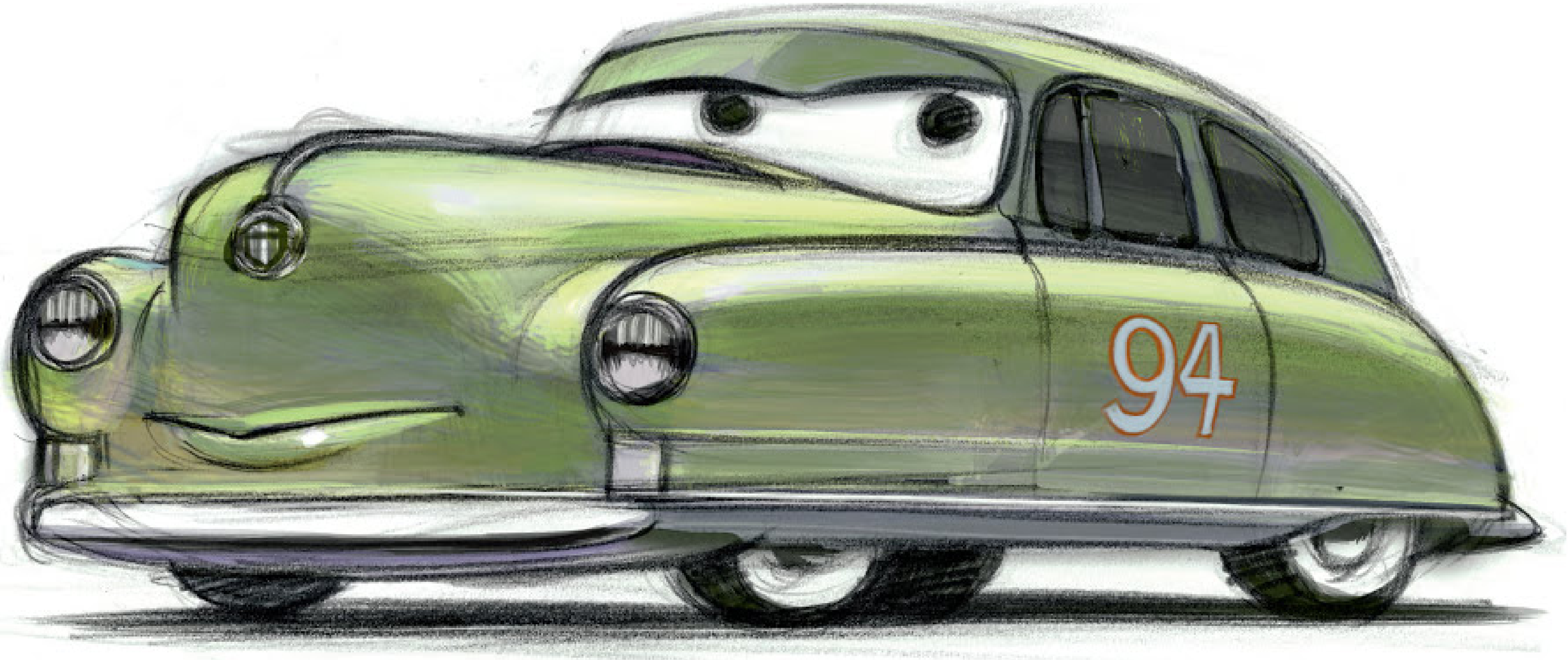
Additionally, we needed a crew chief for Doc, (based on Smokey Yunick) and I immediately thought of the Hudson pickup trucks made in the late '40s. Luckily, the grille already had a bit of a mustache look, so it was a great starting point.

—**JAY WARD,** Creative Director, Cars Franchise

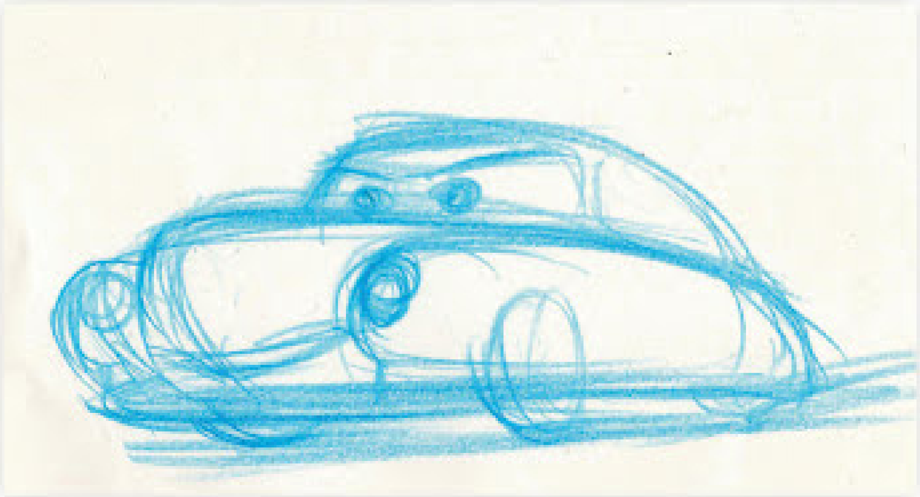


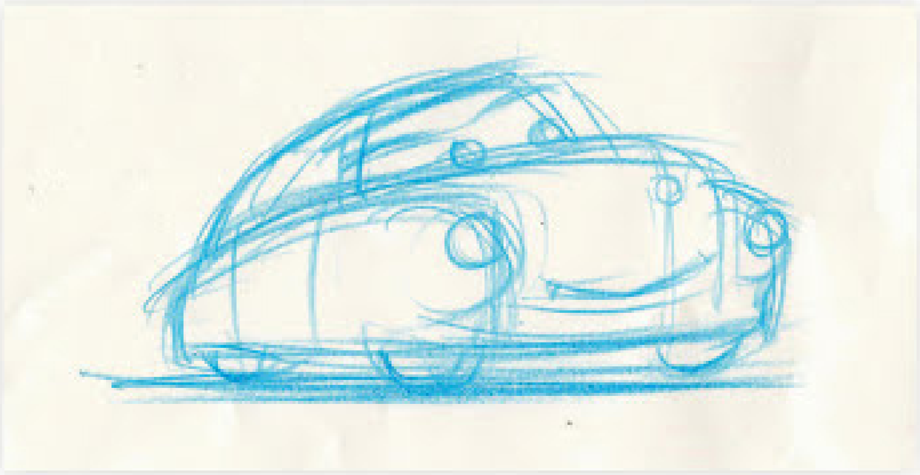
HEMPHILL SERVICE STATION
53

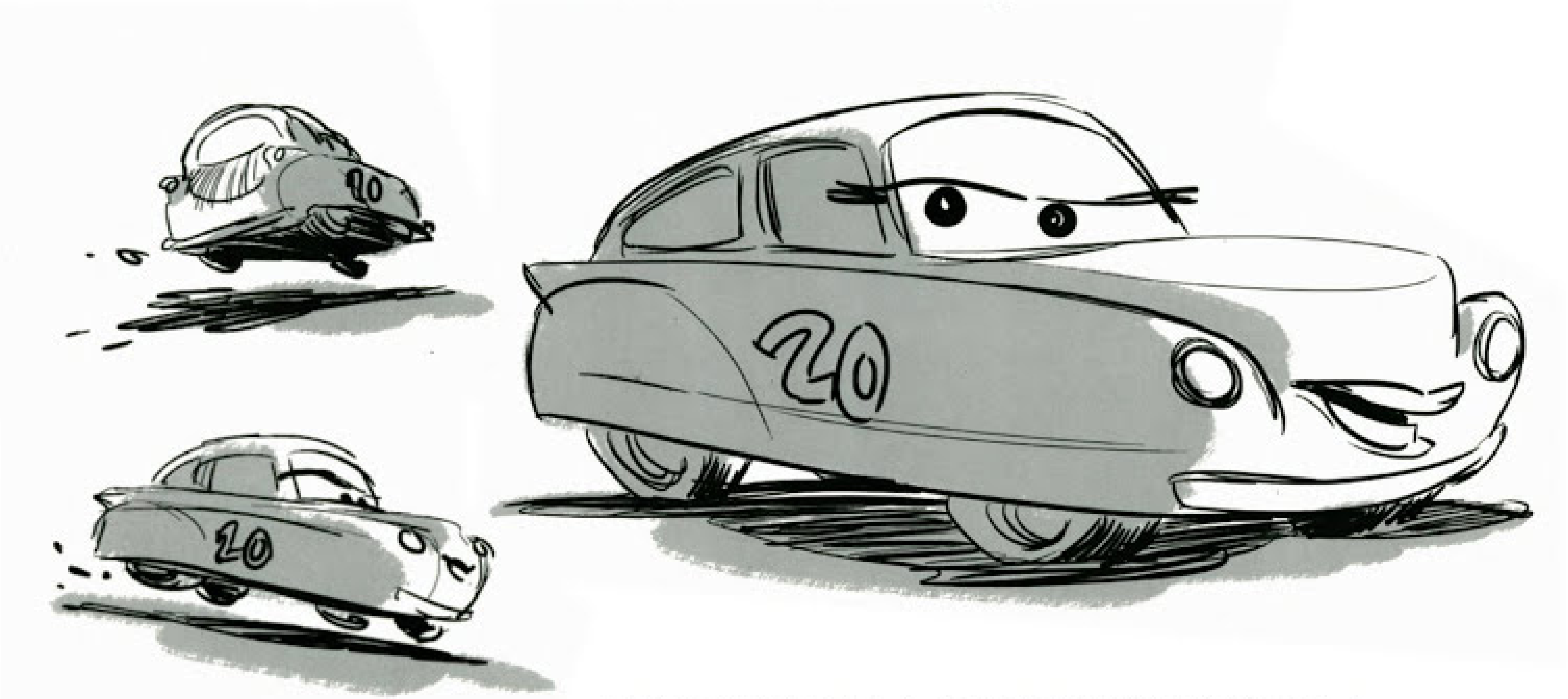
Sid Johnson Motor Co.
Sandersville, Ga.
Plymouth



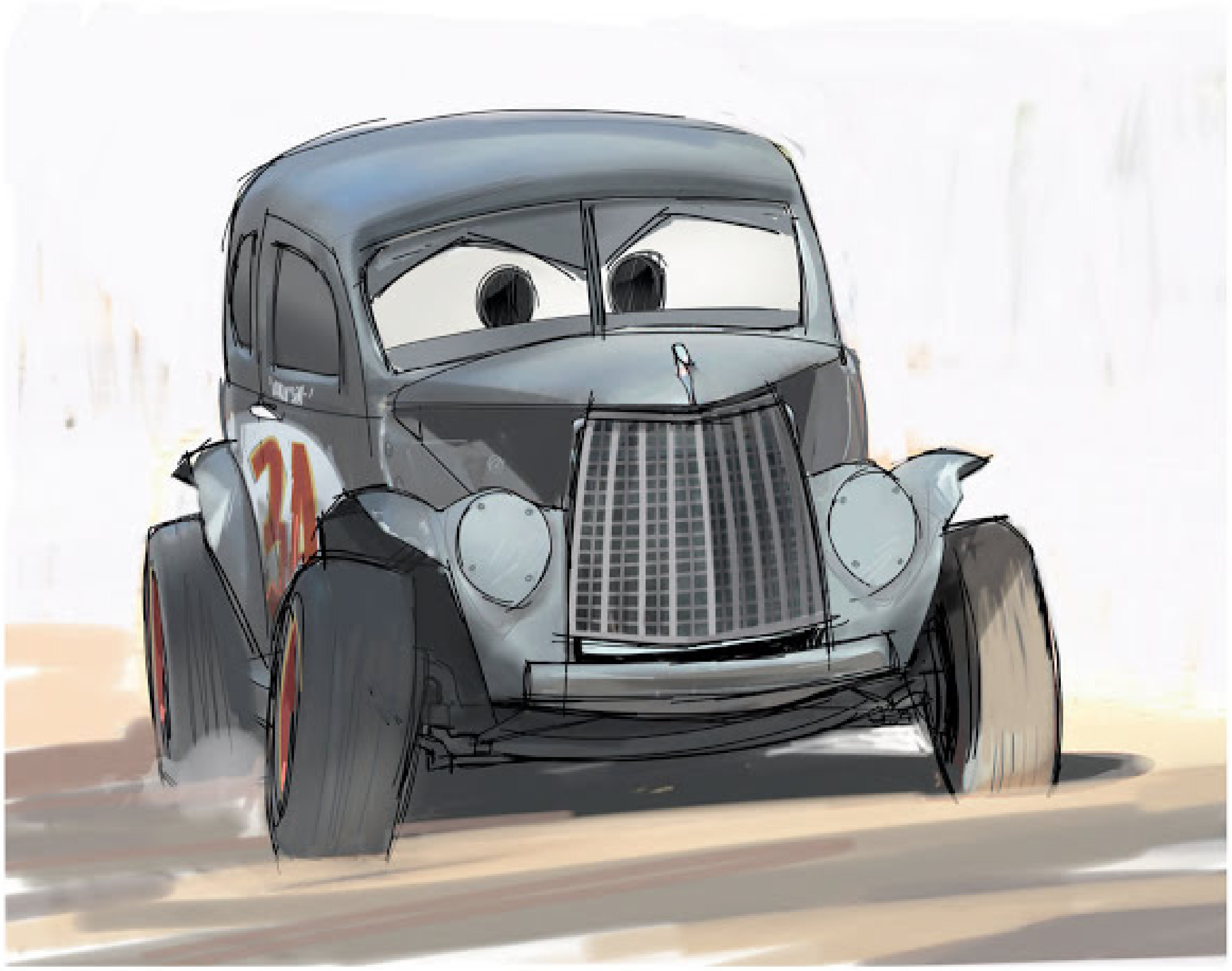
Louise Nash

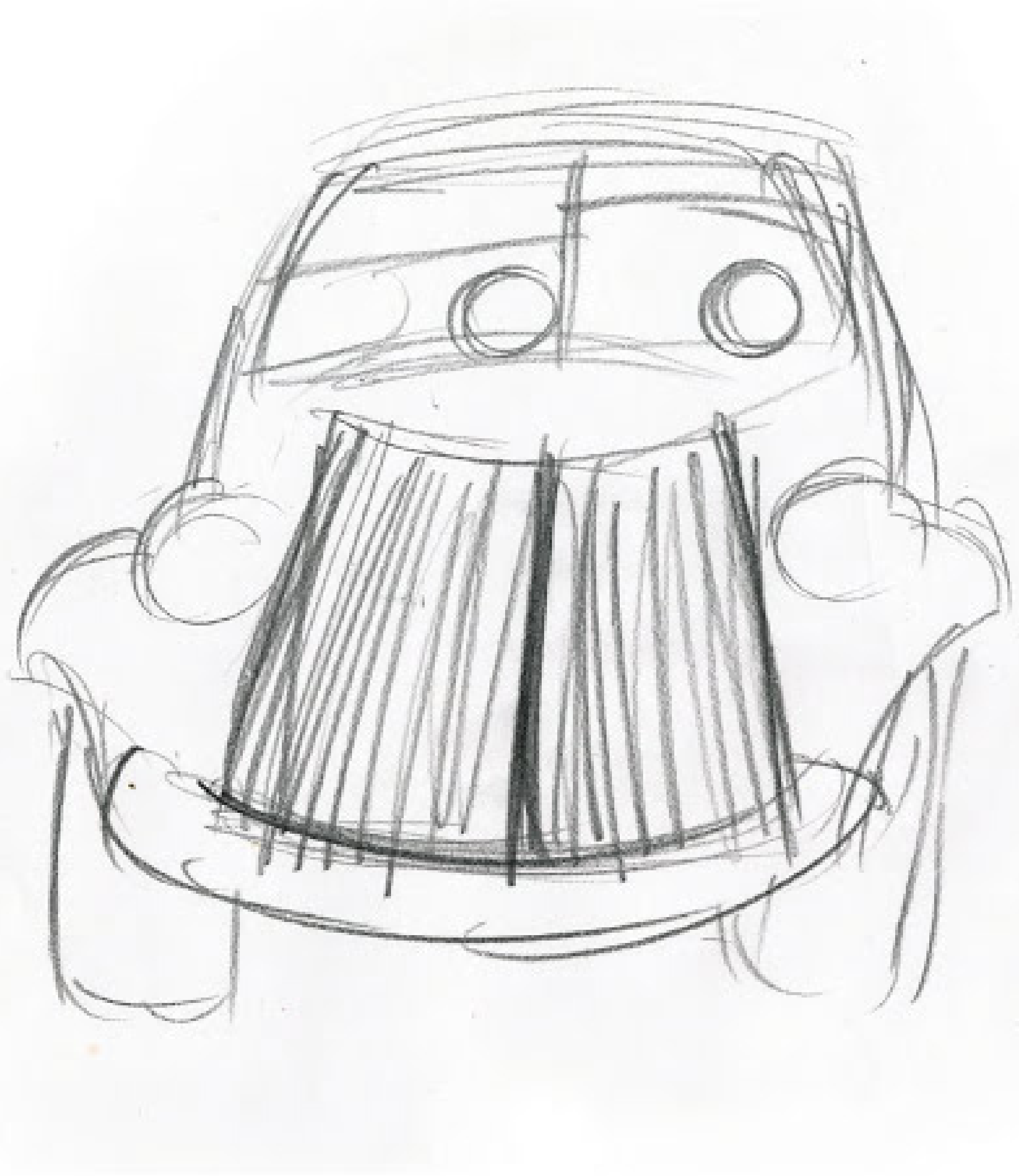




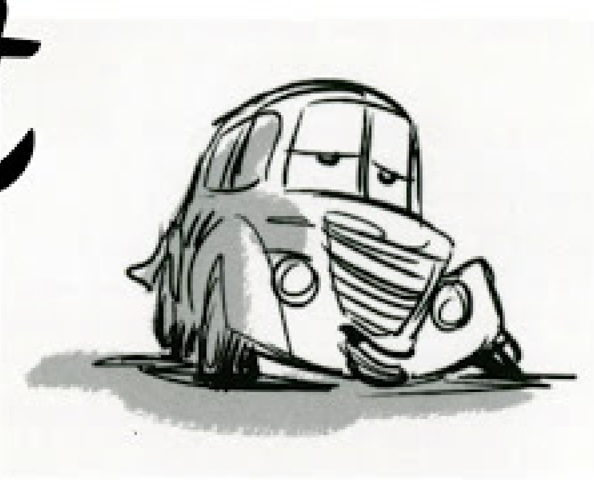


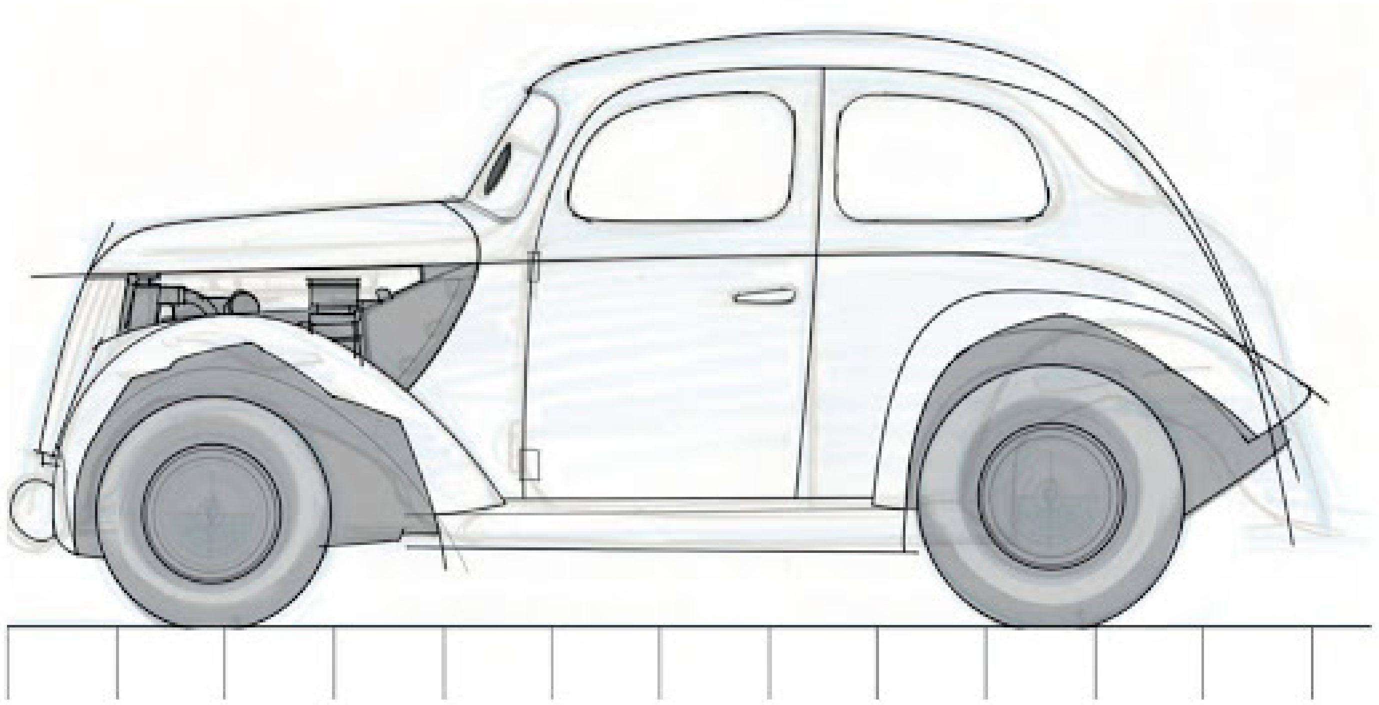
(top) **JOHN LEE** Digital; (lettering at center) **LUISA LEAL** Paint; (far left) **JOHN LEE** Pencil; (left and above) **SCOTT MORSE** Digital; (opposite) **JAY SHUSTER** Photography

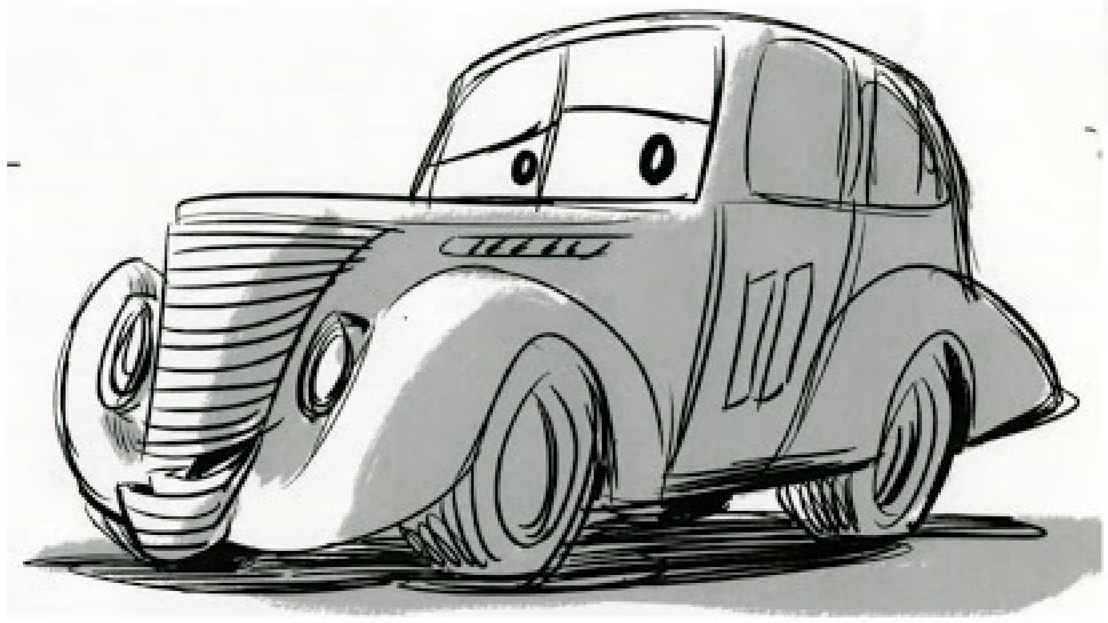


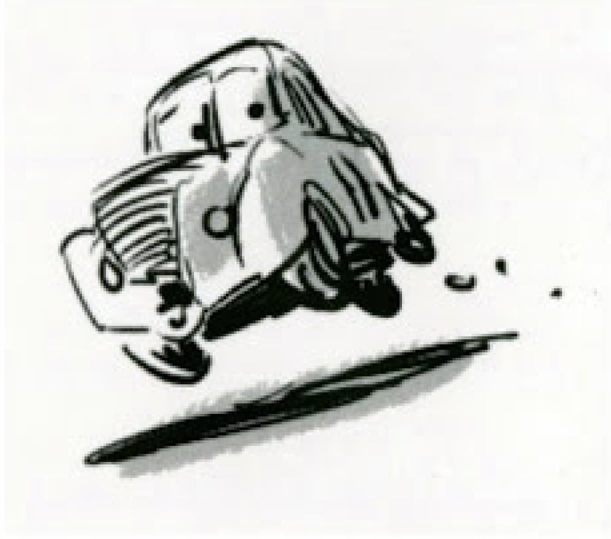


River Scott

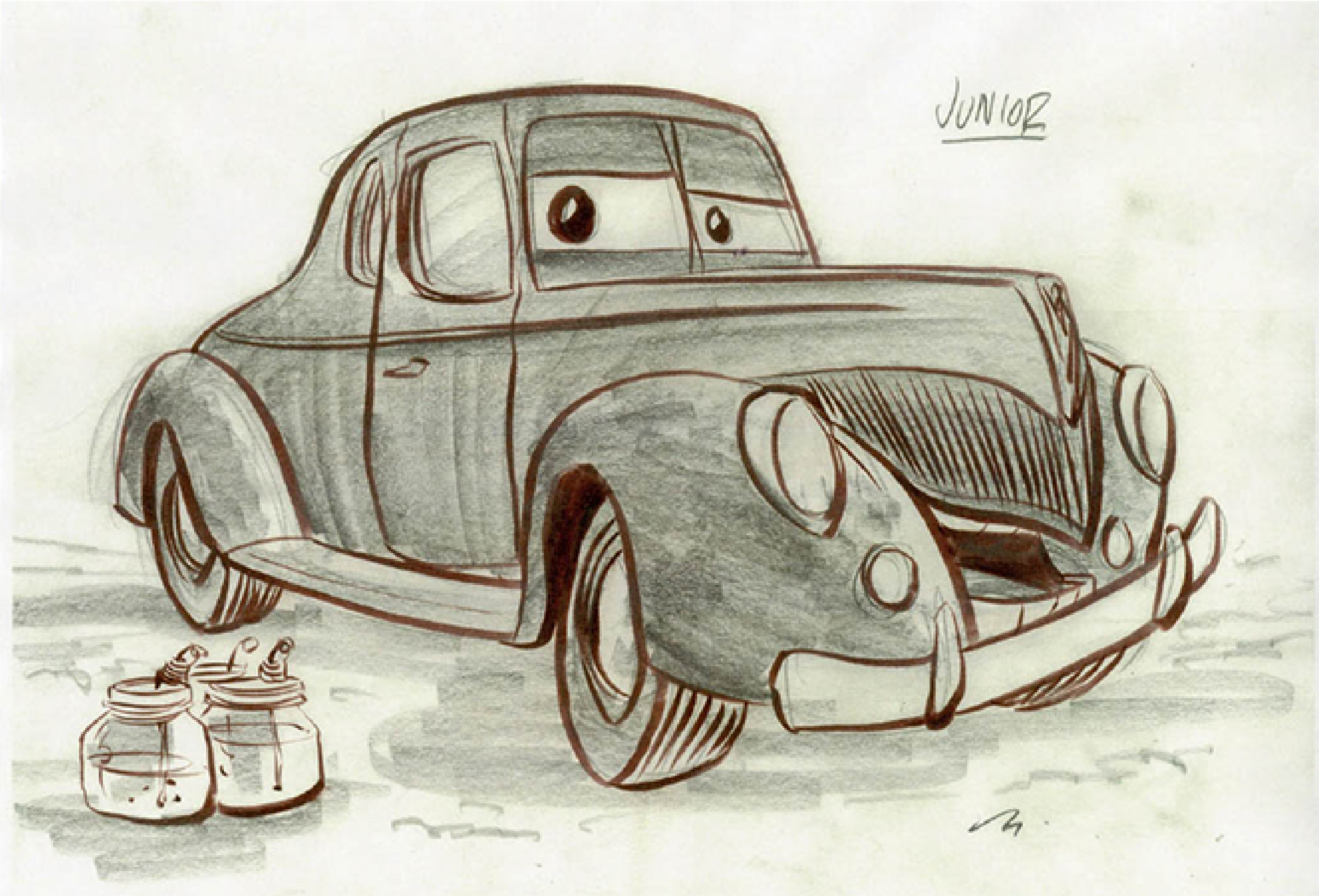


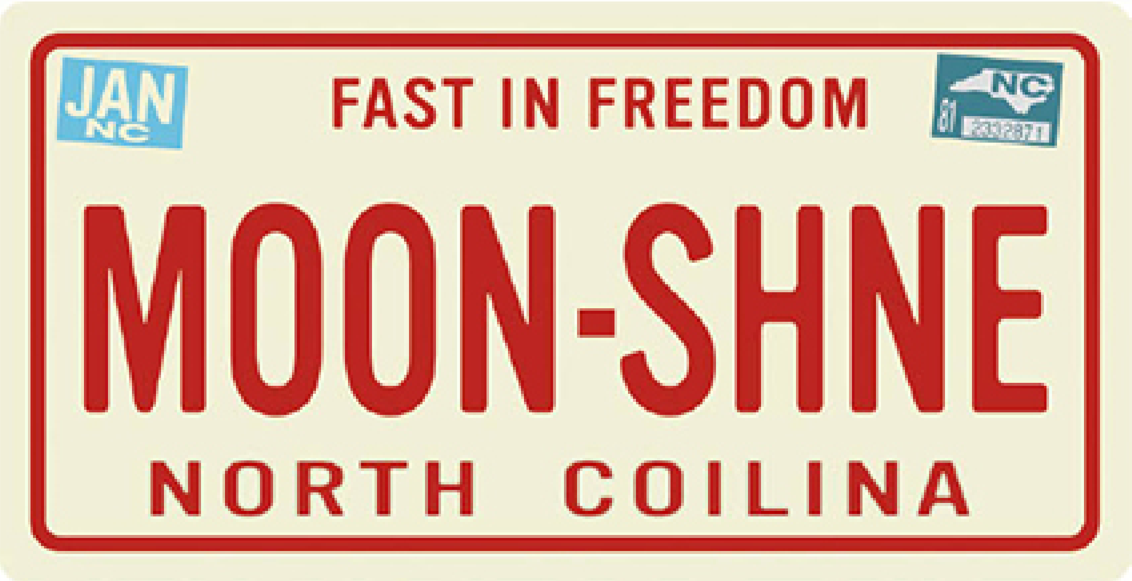


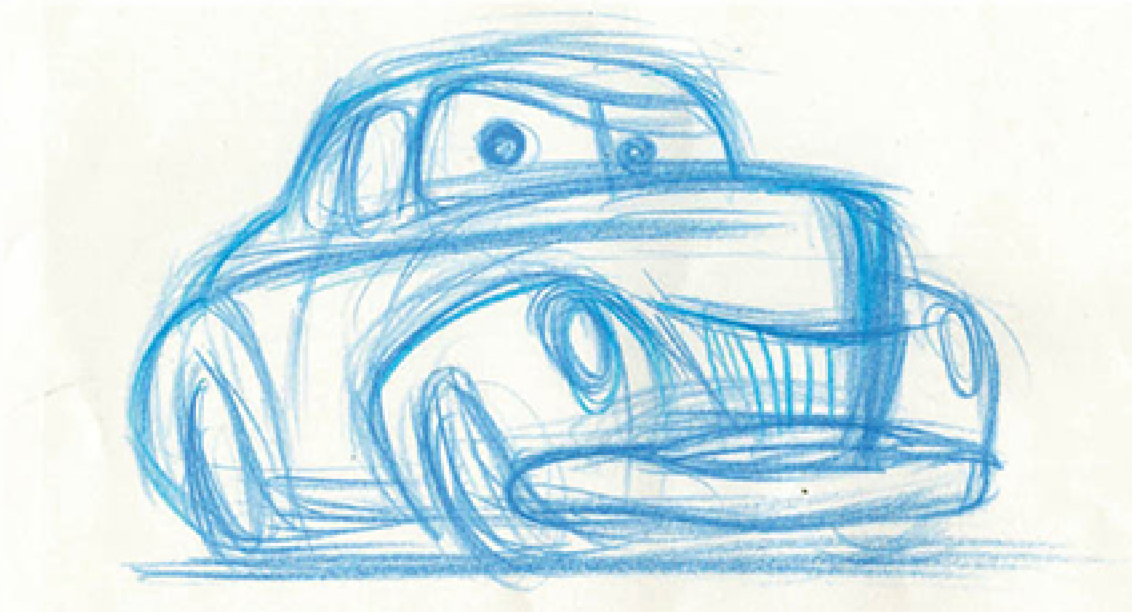


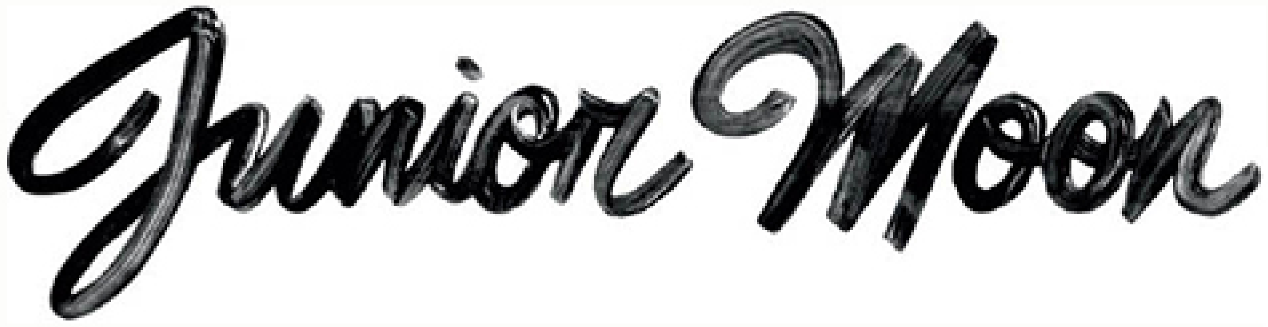


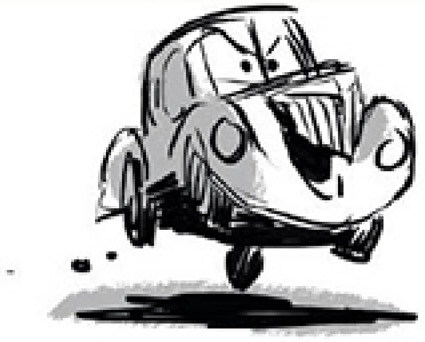
(top left) **JAY SHUSTER** Digital; (top right) **JOHN LASSETER** Pencil; (lettering at center left) **BERT BERRY** Paint; (left) **SCOTT MORSE** Digital; (above) **JAY SHUSTER** Digital

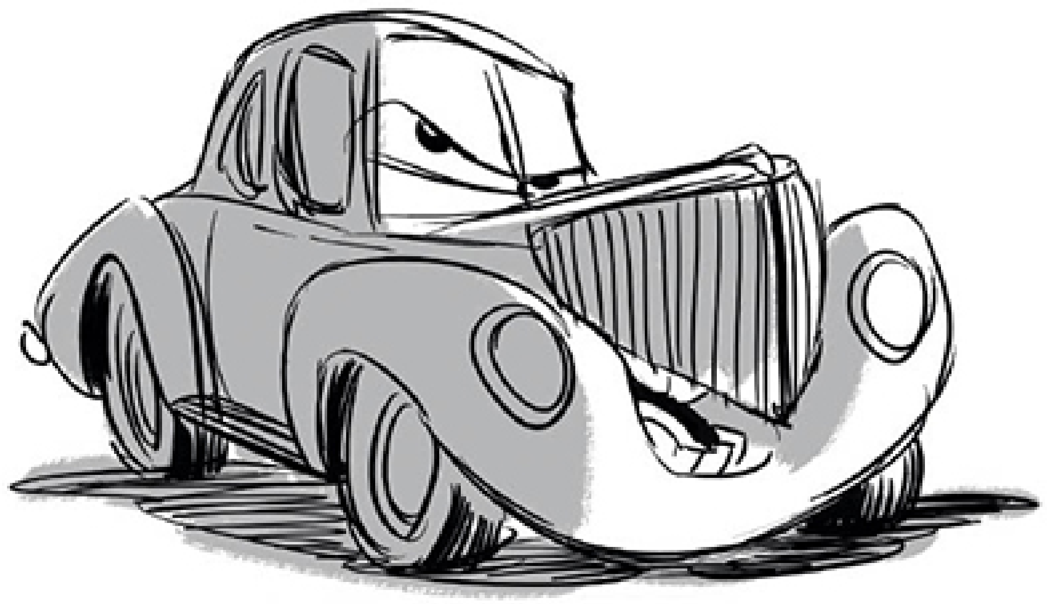

JUNIOR

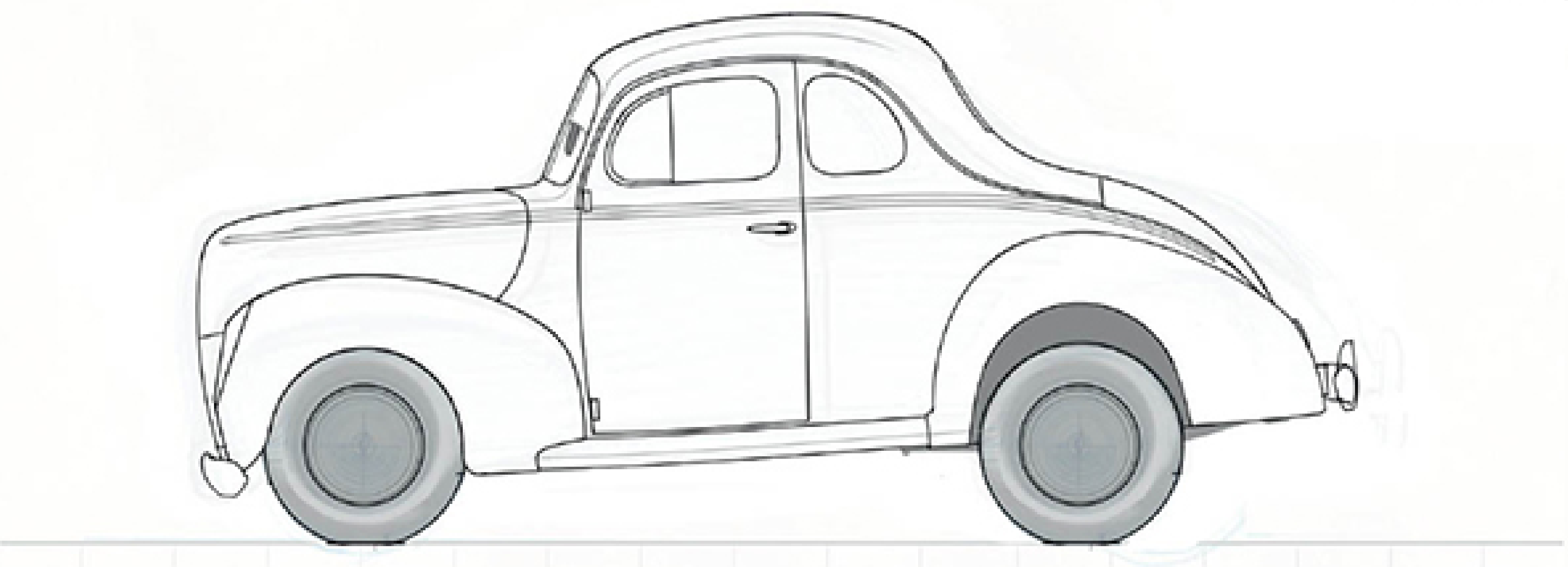

JAN
NC
FAST IN FREEDOM
NC
81
2332871
MOON-SHNE
NORTH COILINA

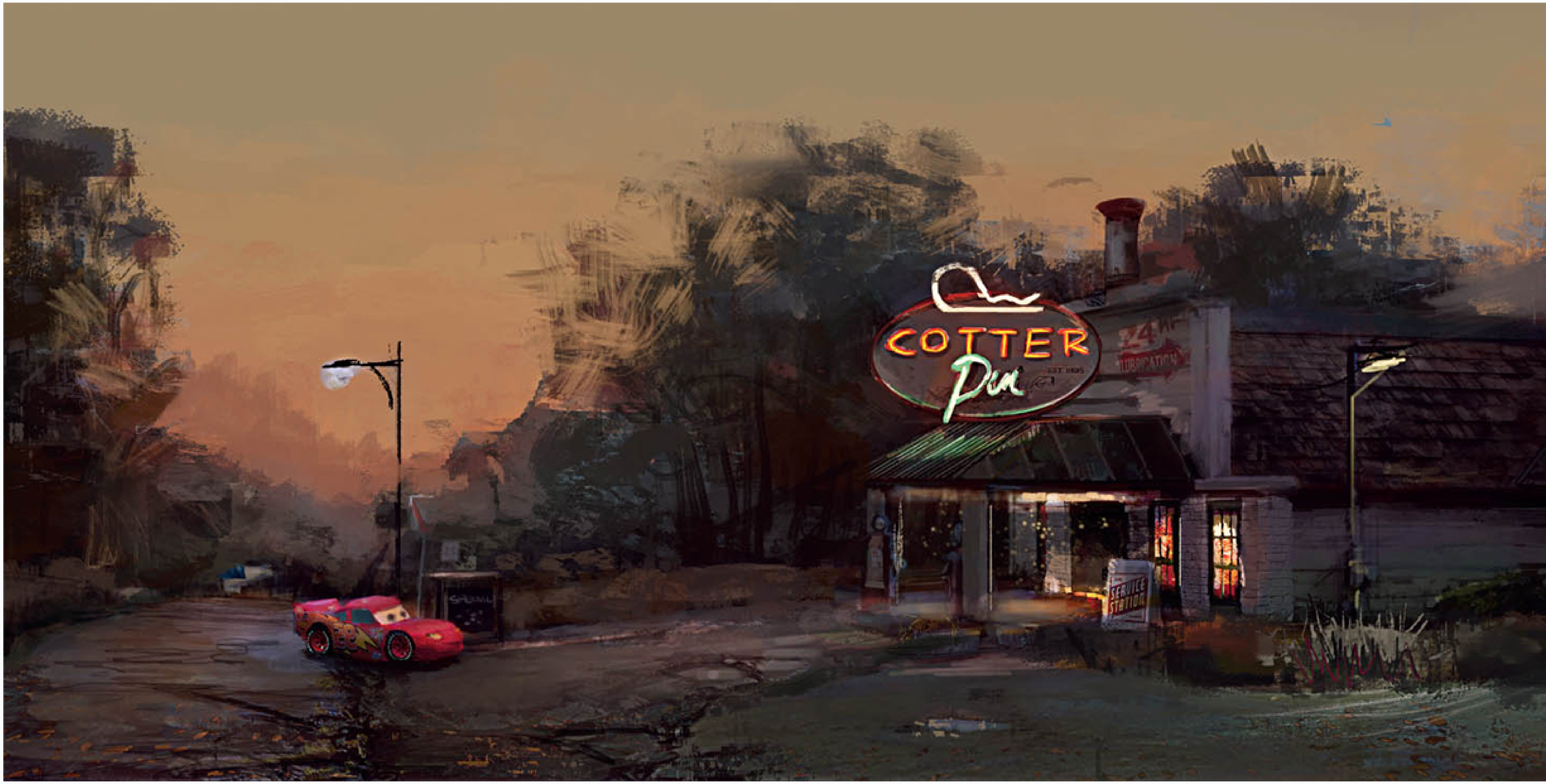



Junior Moon

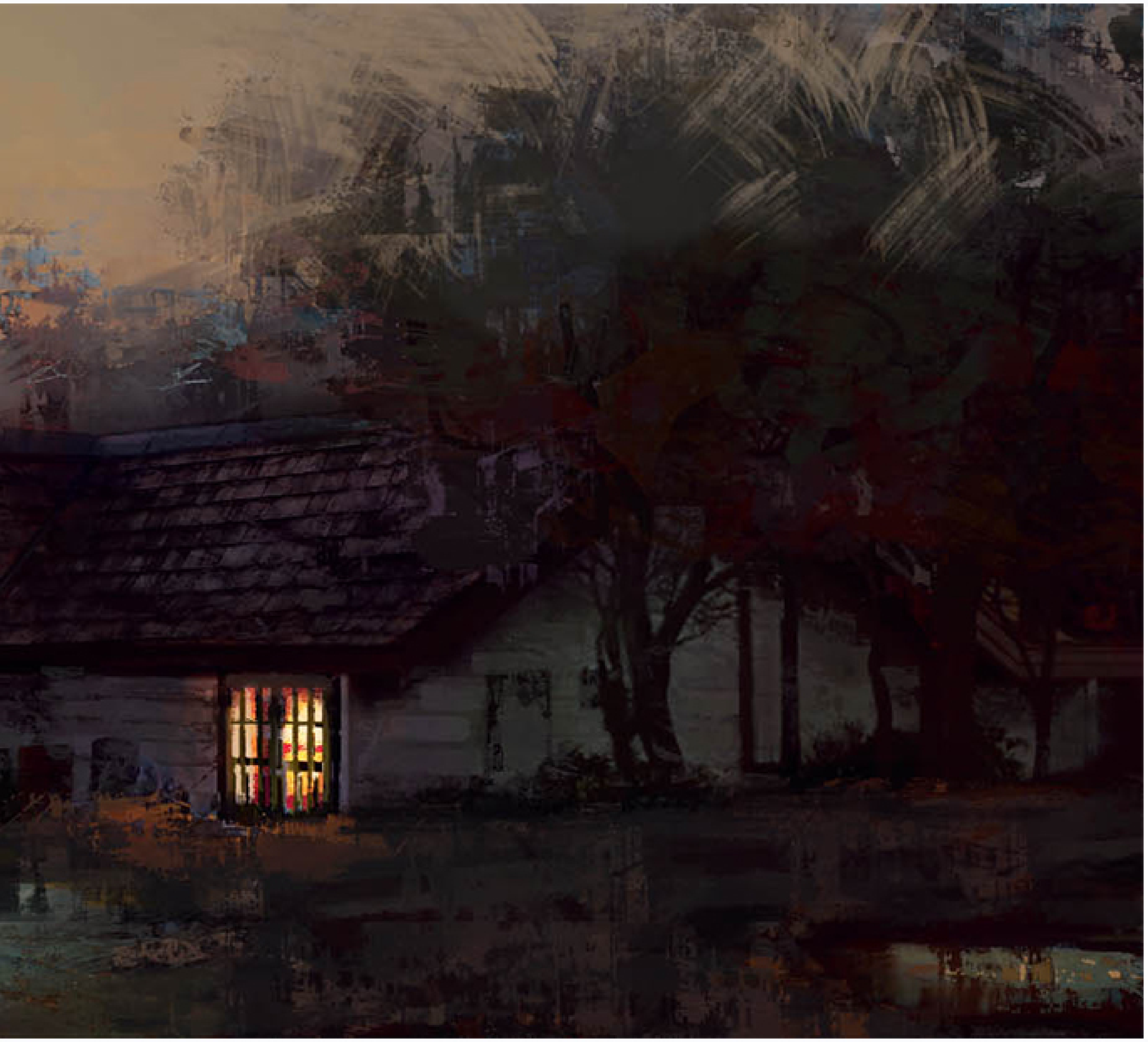


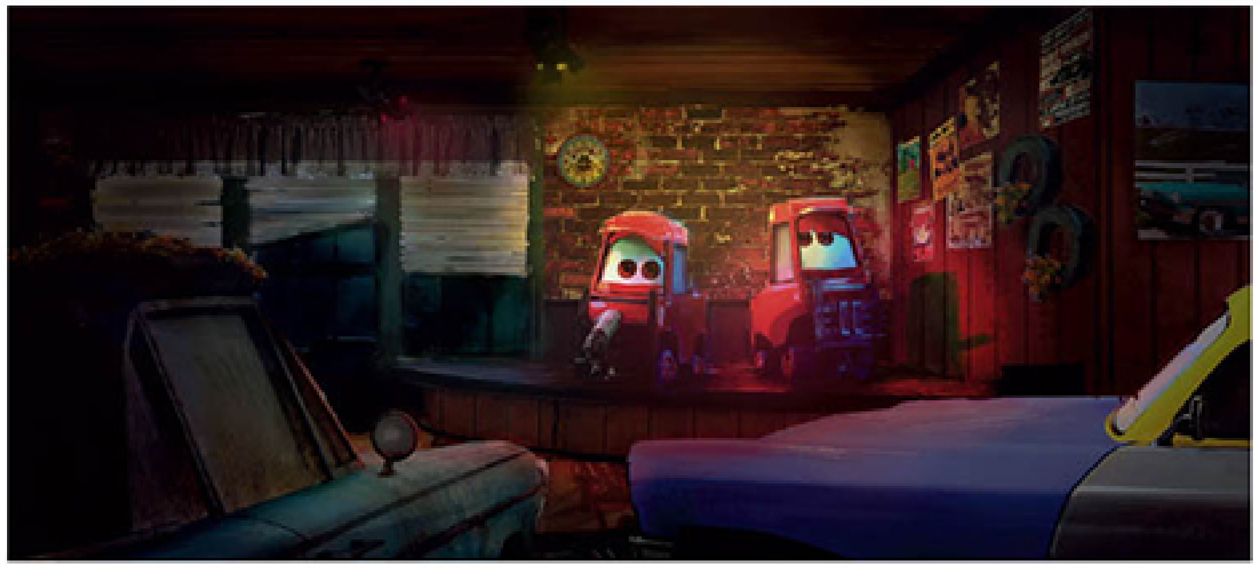


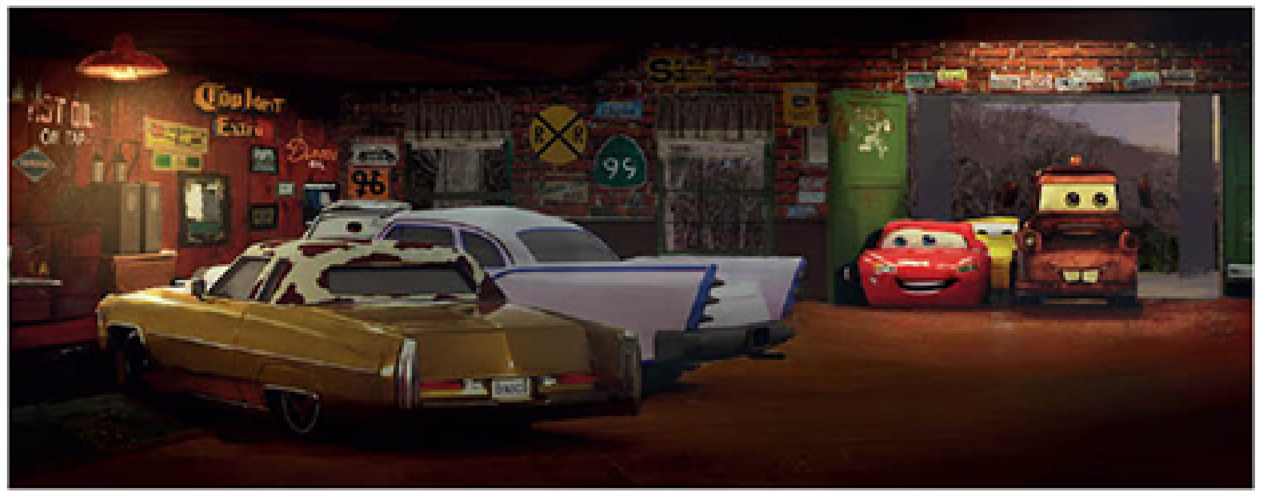


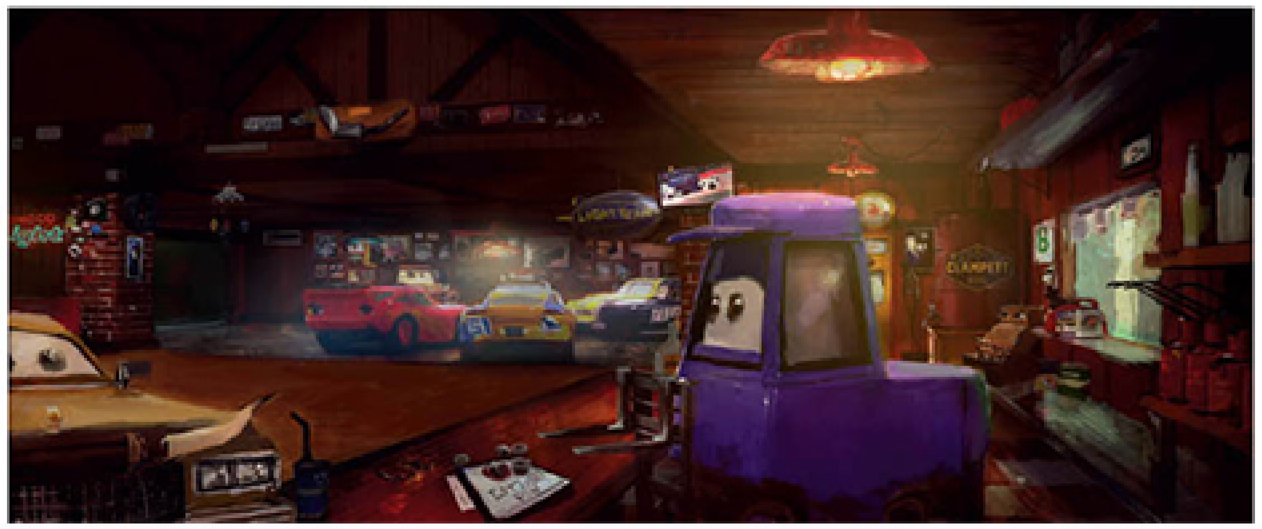

COTTER
Pin
EST 1925
24 HR
LUBRICATION
SERVICE STATION

Drew Hartel, Digital









THE LEGENDS
OLD-SCHOOL TRAINING

Every sports film has that moment where the protagonist(s) has to dig deeper than ever before and Old School Training is that moment in *Cars 3*. Working on this sequence, I really wanted the audience to feel the struggle and discomfort of McQueen throughout. The rage and desire to win has never been more present in his life. Not only is it a physically grueling endeavor, it's a mental one. The shedding of his wrap represents the shedding of his past tribulations and allows him to elevate his game.

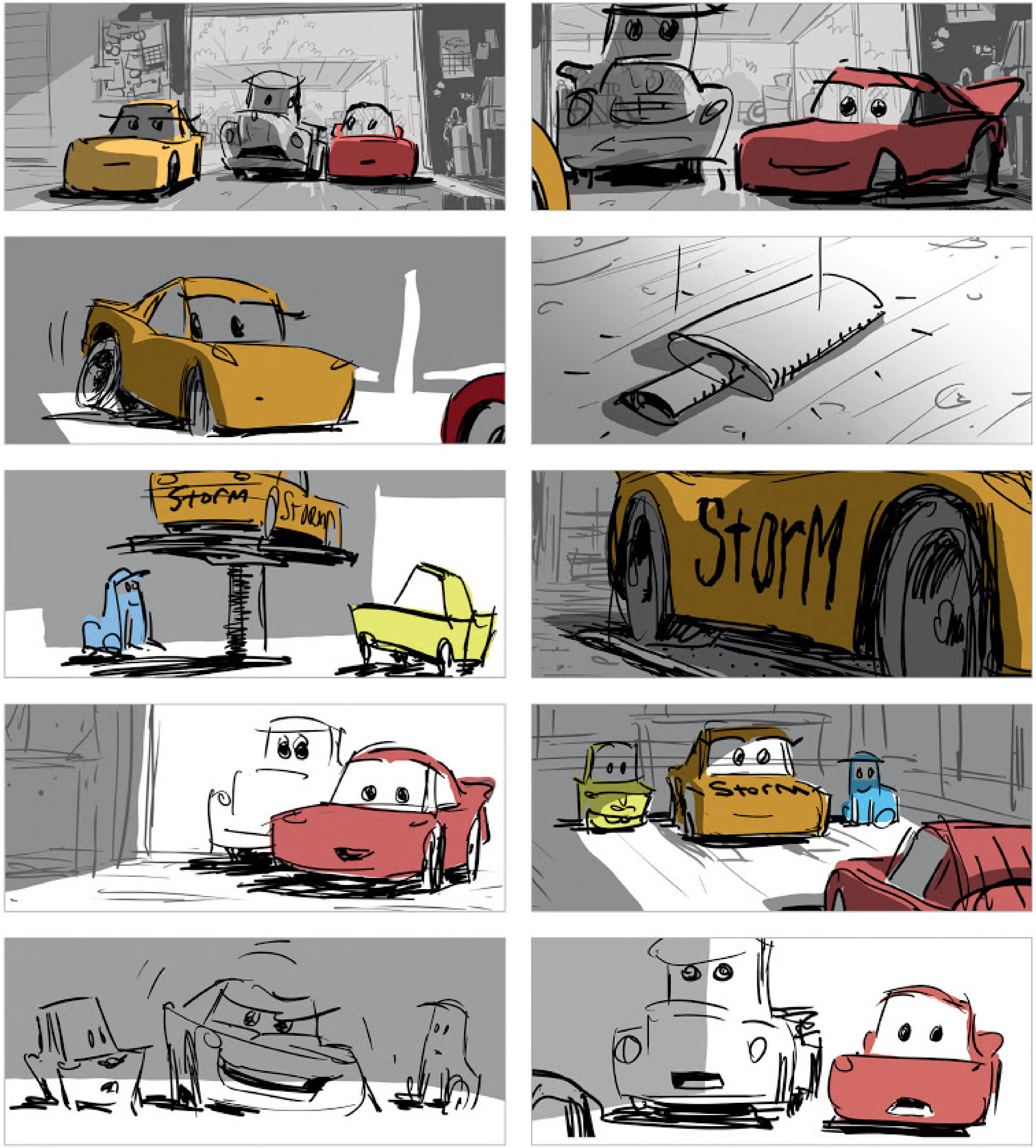
—**MIKE YATES,** Story Artist

When tackling this training montage, I knew that the cuts between shots would have to be rapid. Focusing on a clear silhouette for a quick read made these particular storyboards successful.

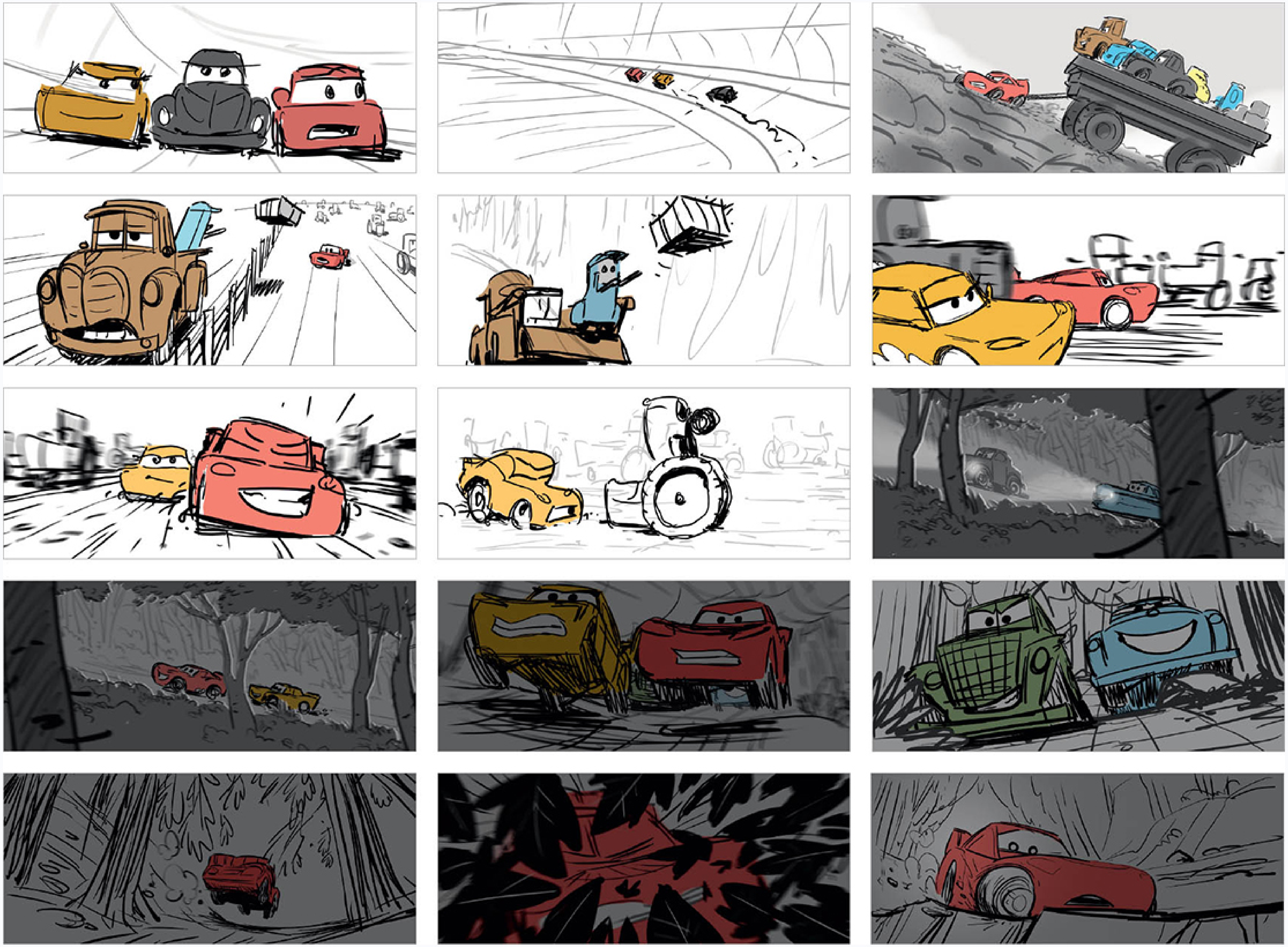
—**MIKE DALEY,** Story Artist

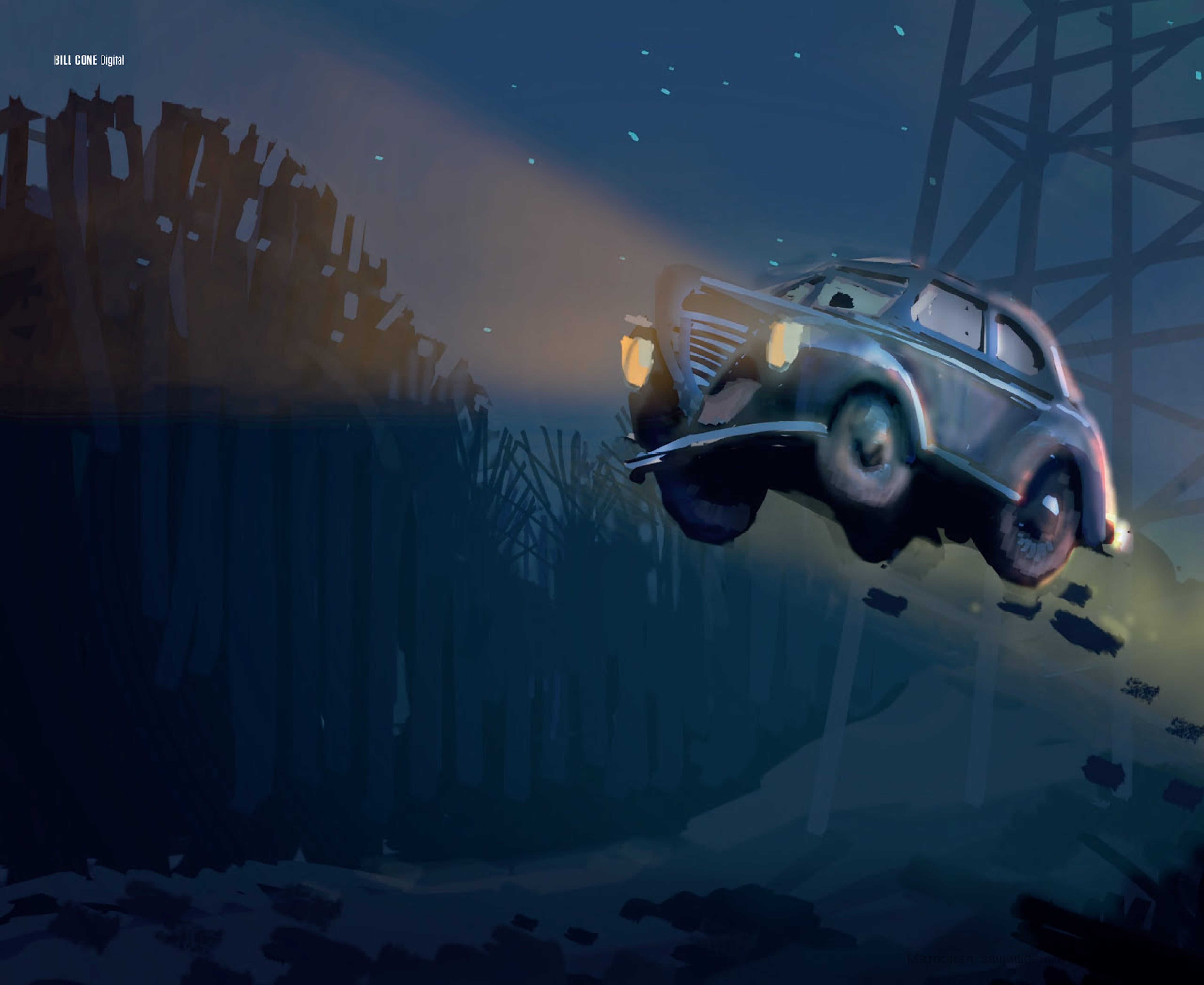
Before the Legend cars were in the movie, the team had a meeting away from the Pixar Studios to discuss the direction of the story. These kinds of off-sites are typically held in very mundane locations like conference rooms. At this particular off-site, a Vintage Car rally that was progressing up the California coast had stopped outside the venue. Ironically, the seeds of the idea to include vintage NASCAR racers in the story began to grow at that meeting.

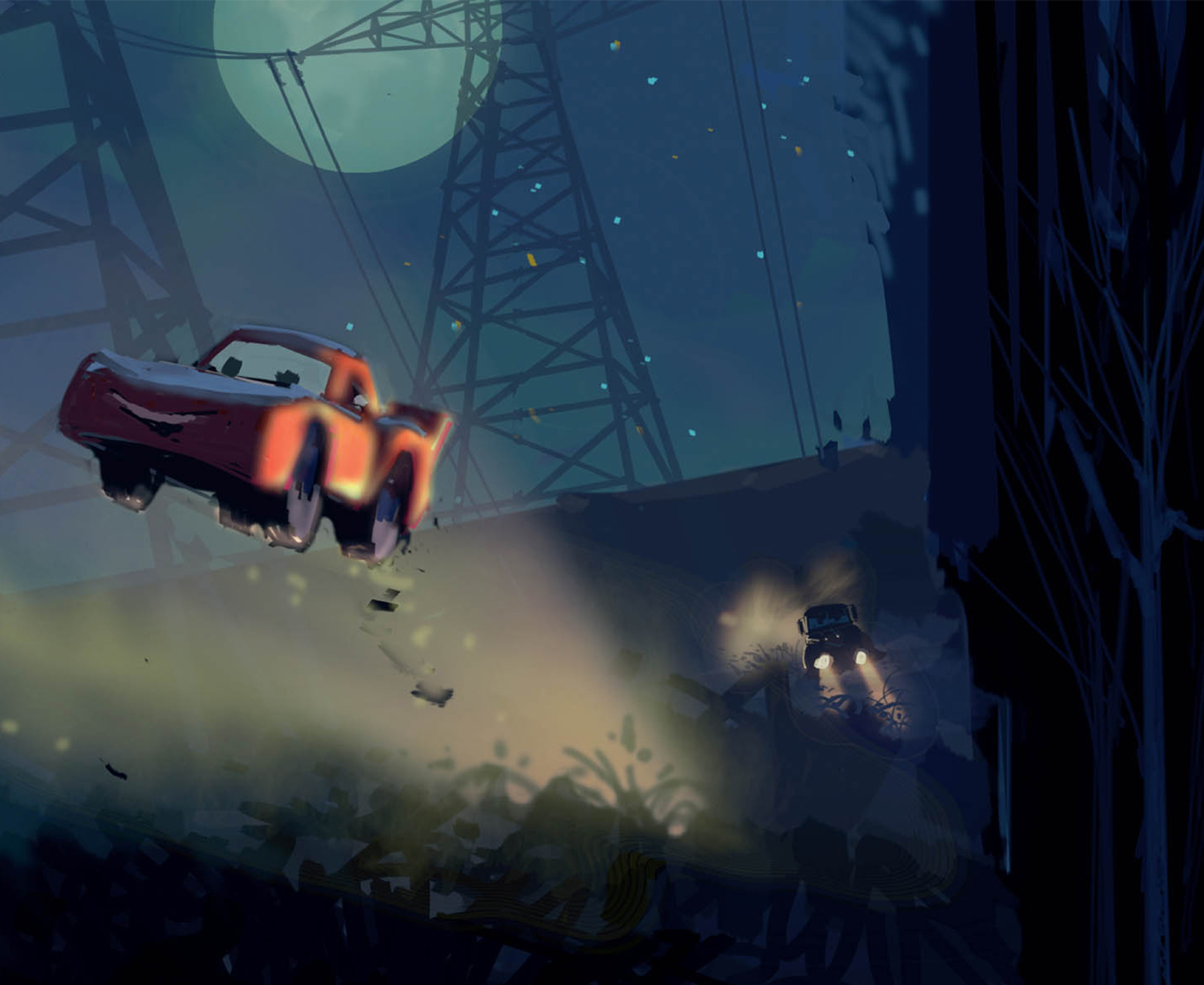
—**CHRIS ROMAN,** Story Artist

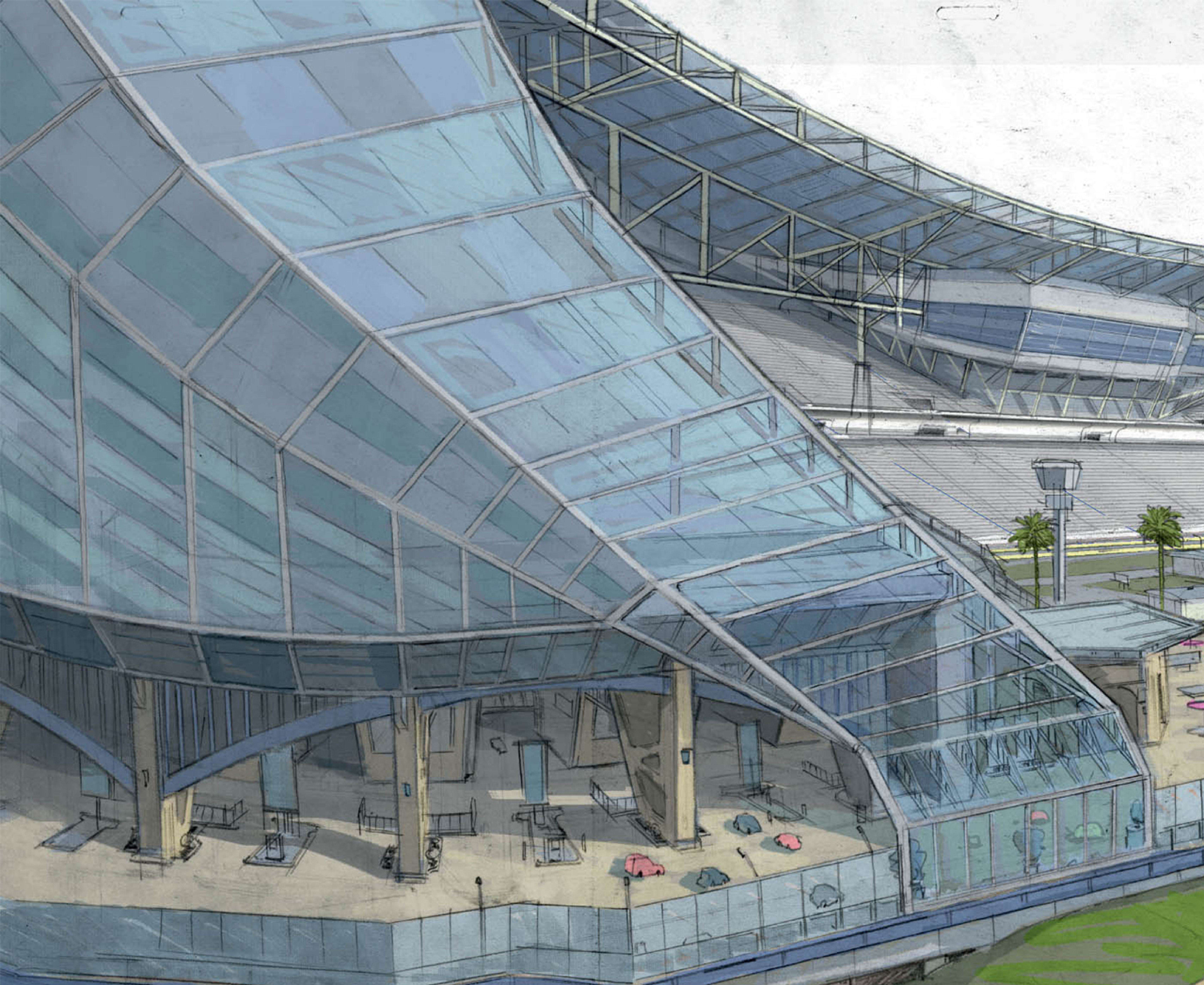


GARETT SHELDREW, JOHN HOFFMAN, MICHAEL YATES Storyboards; (opposite) **BILL PRESING, GARETT SHELDREW, LOUIS GONZALES, MICHAEL DALEY, SCOTT MORSE** Storyboards

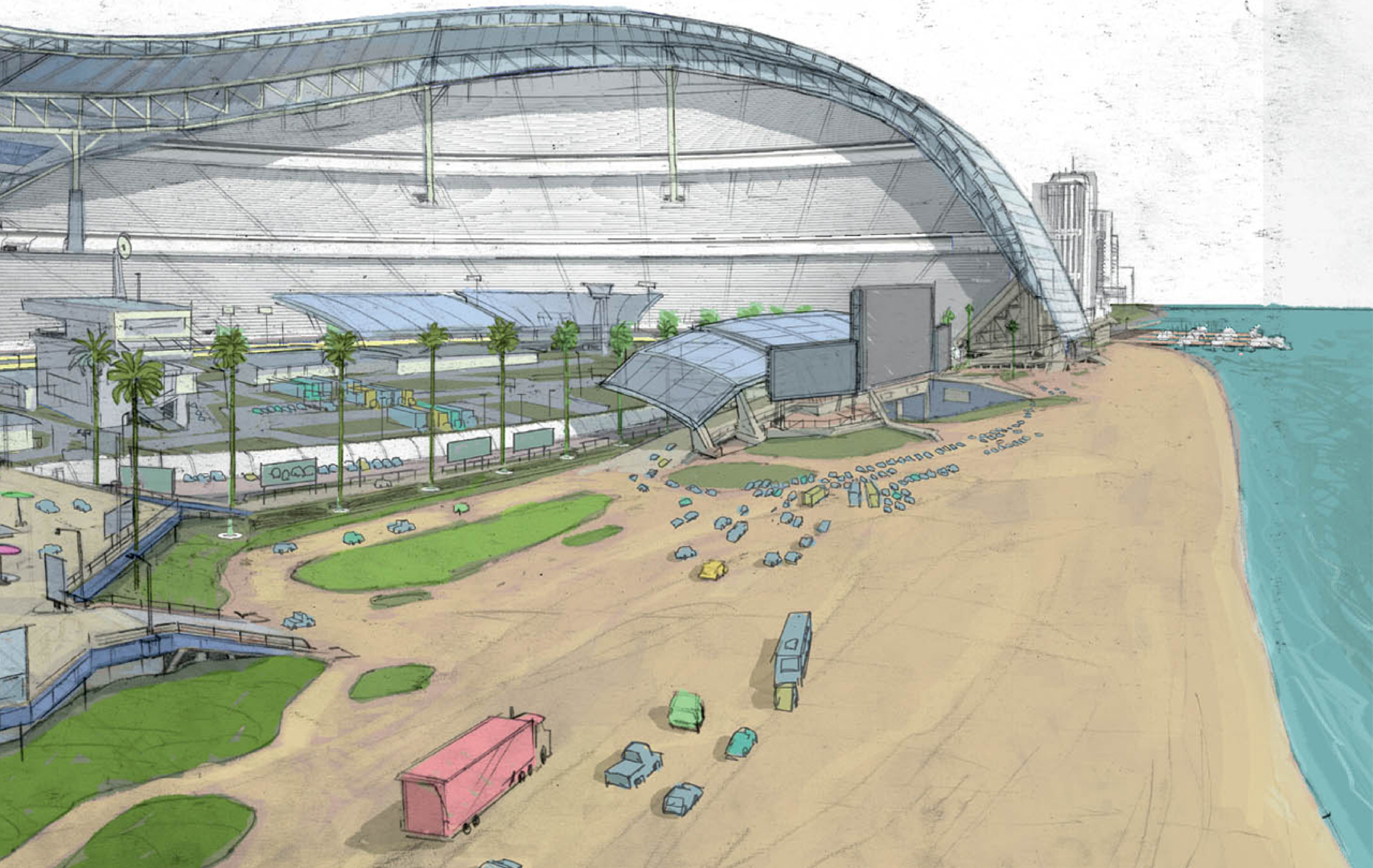


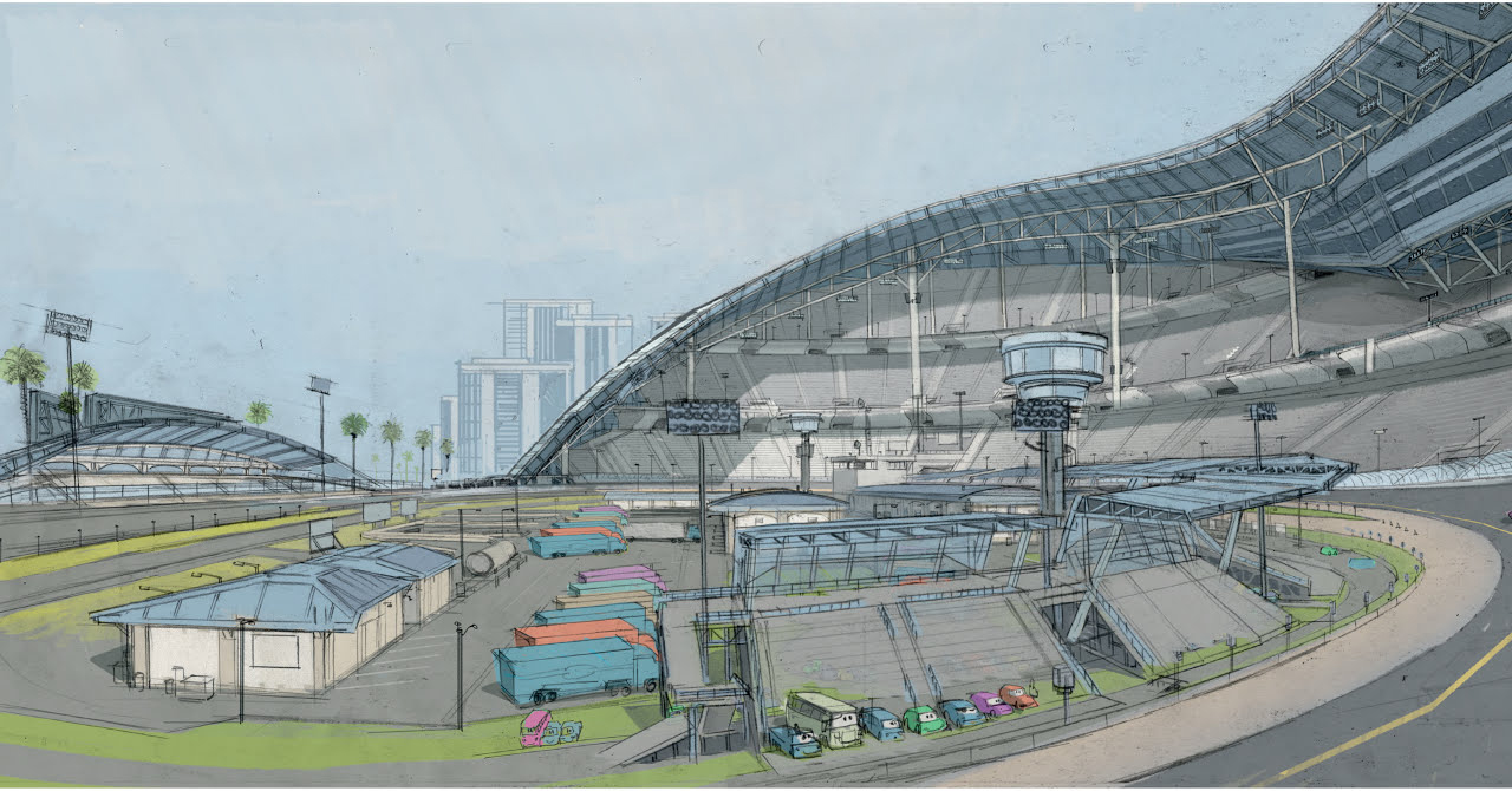




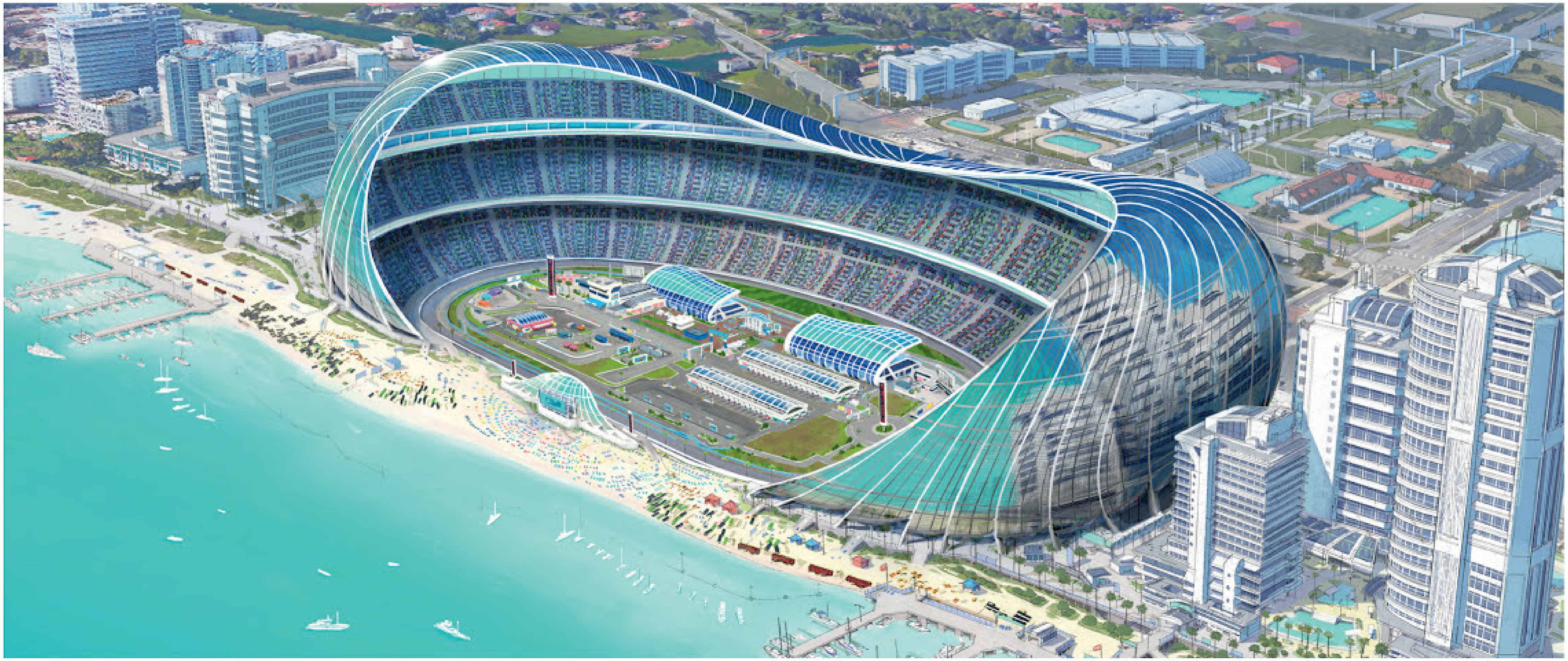


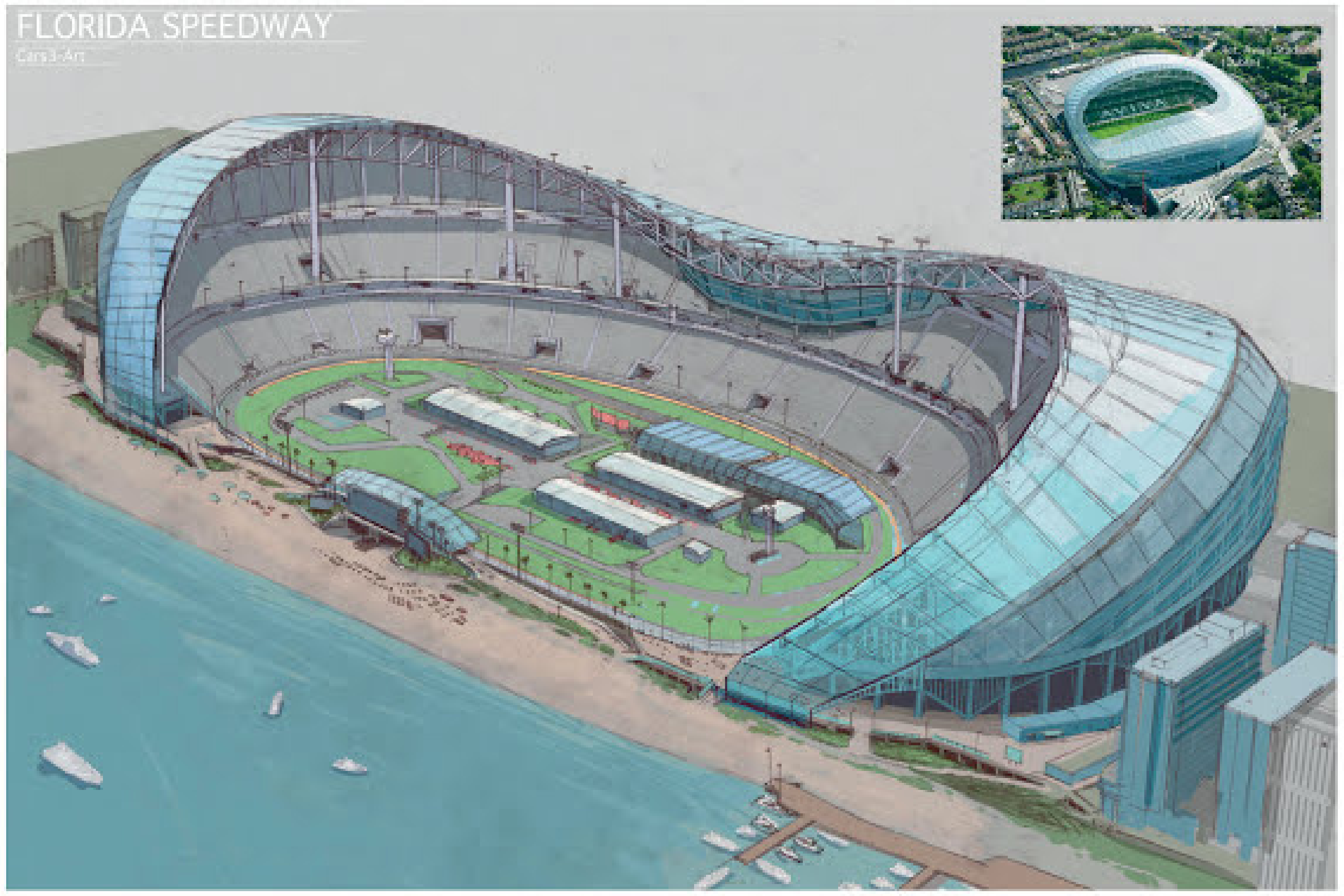
ACT THREE



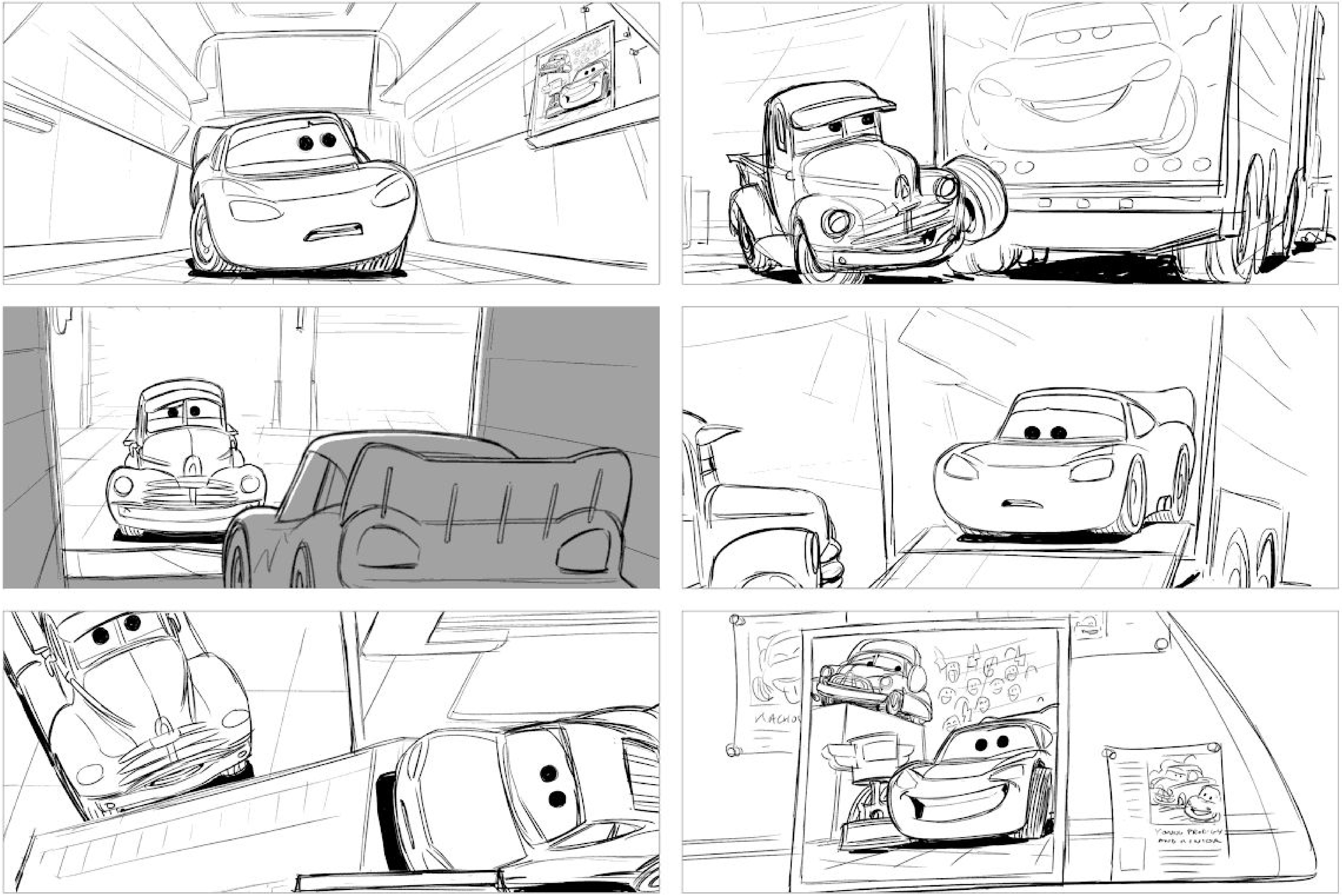


KRISTIAN NORELIUS Digital; (opposite top) Design by **KRISTIAN NORELIUS,** Shader painting by **JENNIFER CHANG;** (opposite bottom left) Design by **KRISTIAN NORELIUS,** Model by **STEVE KARSKI;** (opposite bottom right) **JEROME RANFT** Clay

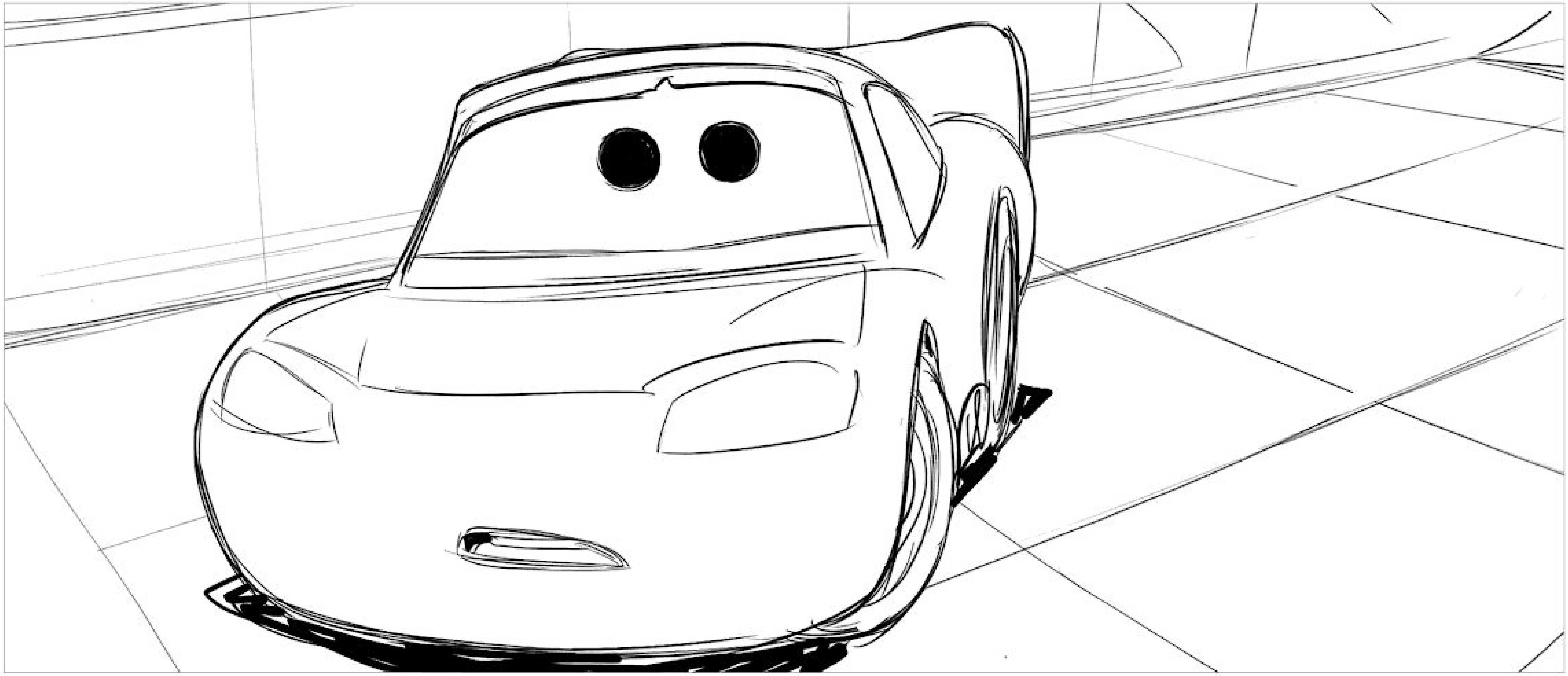


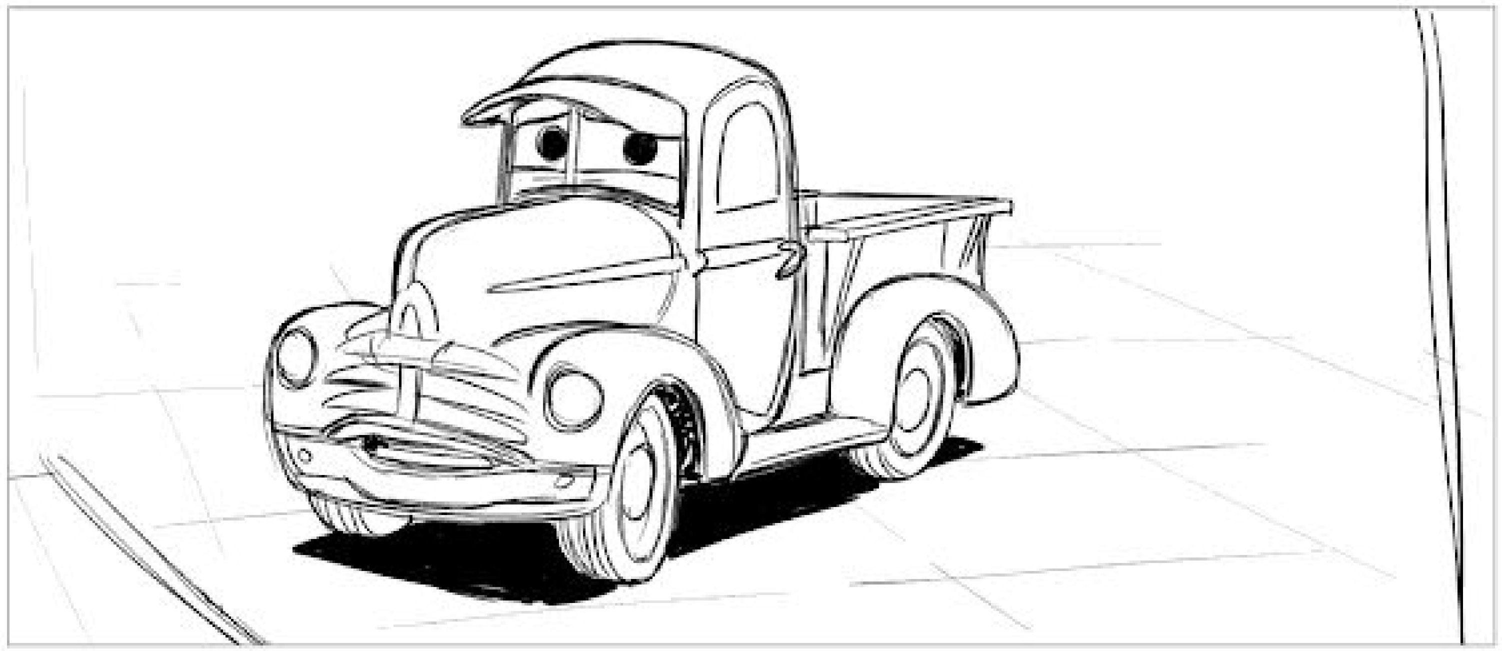

FLORIDA SPEEDWAY
Cars3-Art

FLORIDA 500
FLORIDA 500
500


YOUNG PRODIGY

XAVIER RIFFAULT Storyboards

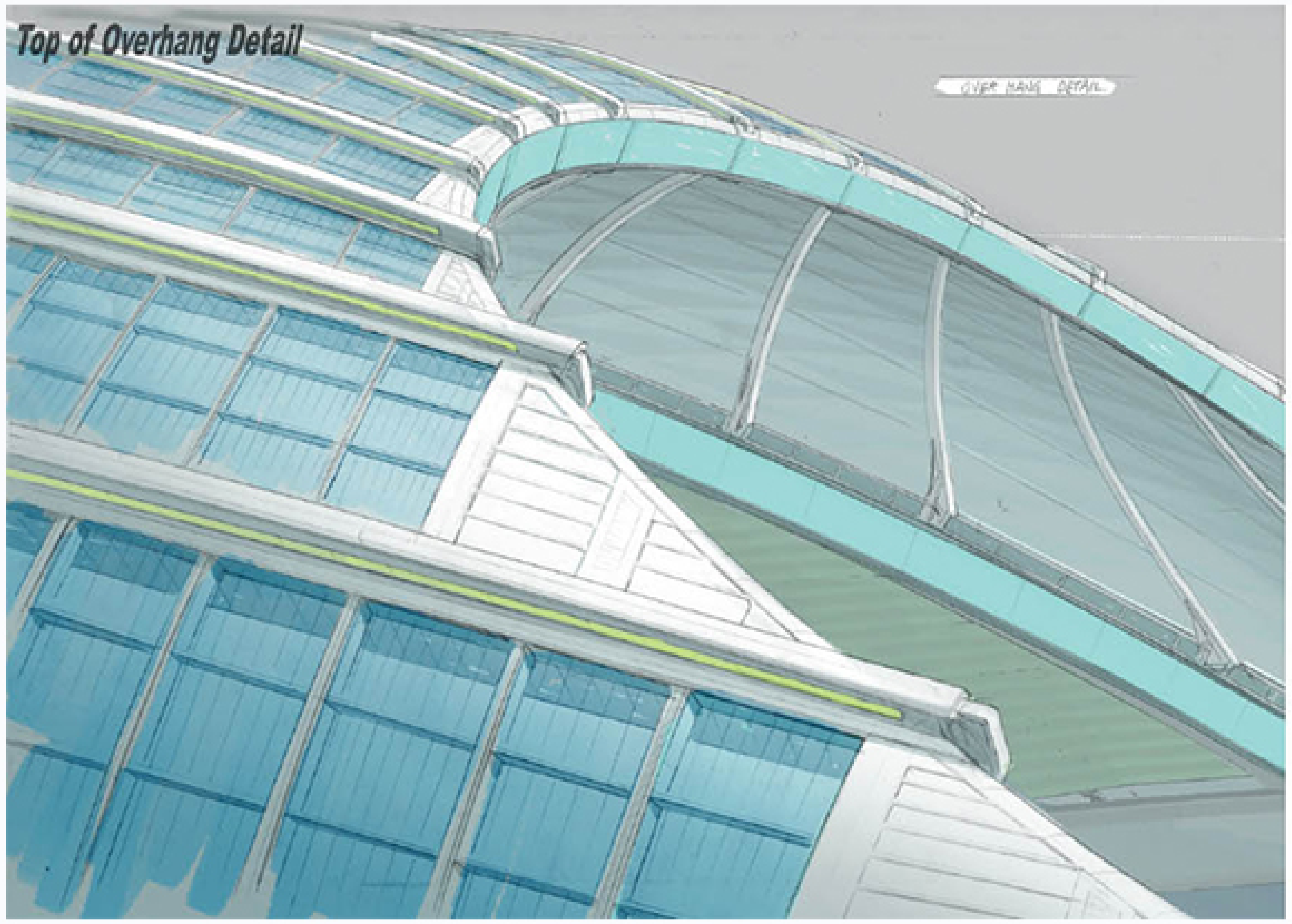




DELETED SCENE: LOCKER ROOM

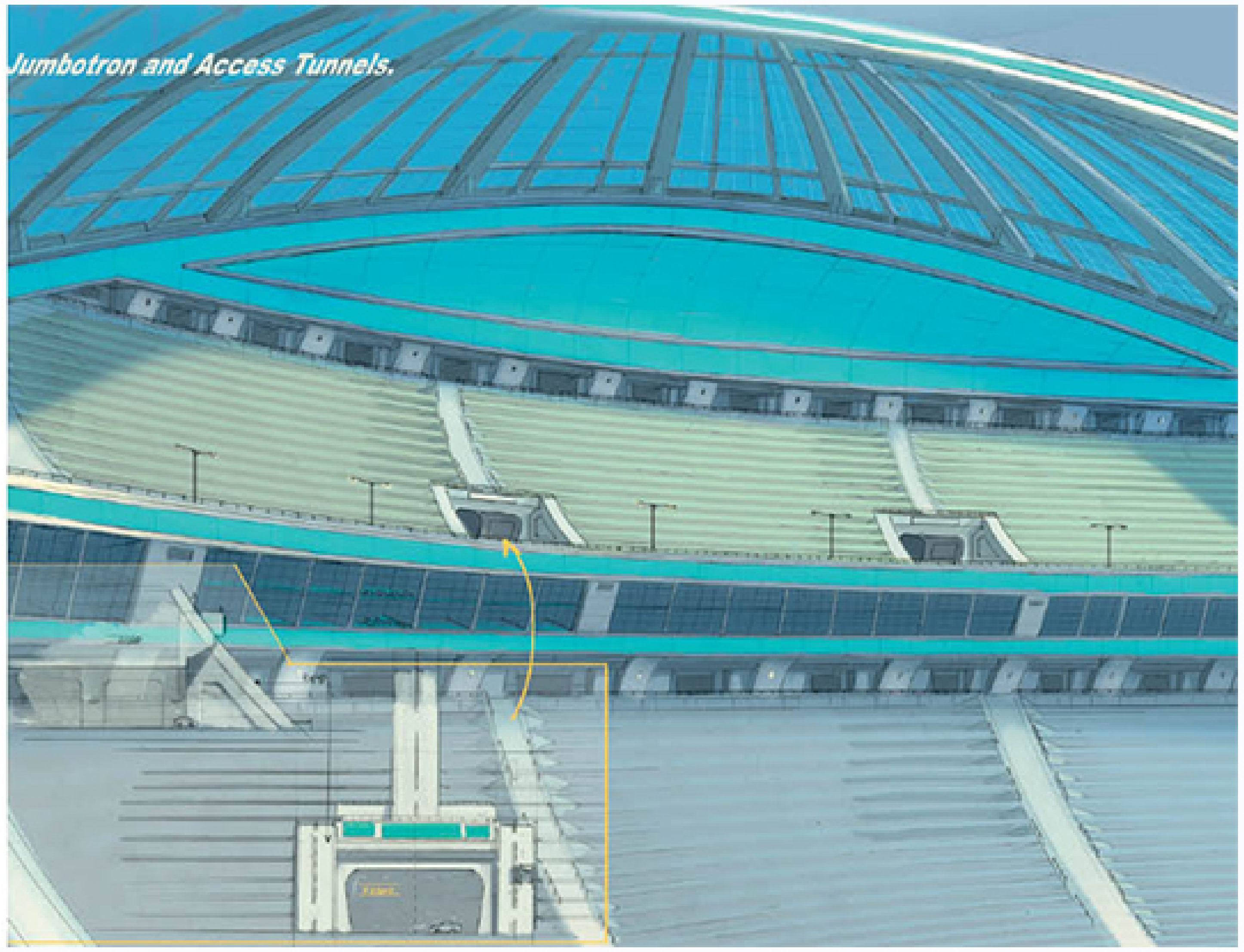
At the peak of his training, McQueen finds himself still unable to beat Cruz. Frustrated with the harsh reality that he can't turn back the clock and that his career might be coming to a head, when Smokey finds him, McQueen reveals his fear that he doesn't want his career to end like Doc's did. Smokey helps McQueen come to realize that Doc's career didn't end with racing, but instead with something deeper and more meaningful: mentoring Lightning McQueen. Sometimes the world is trying to tell you something, and all you have to do is listen.

—**SCOTT MORSE**, Story Supervisor

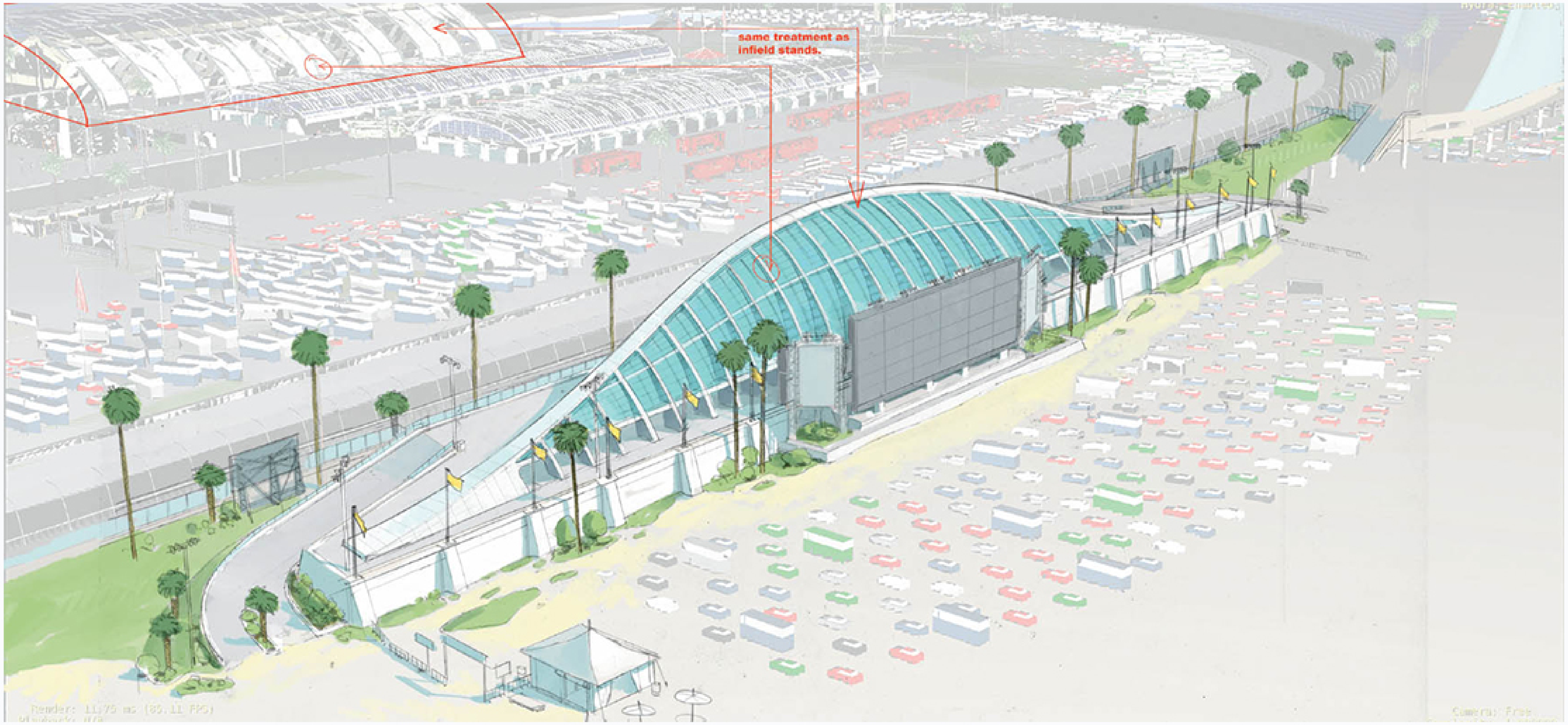


Top of Overhang Detail

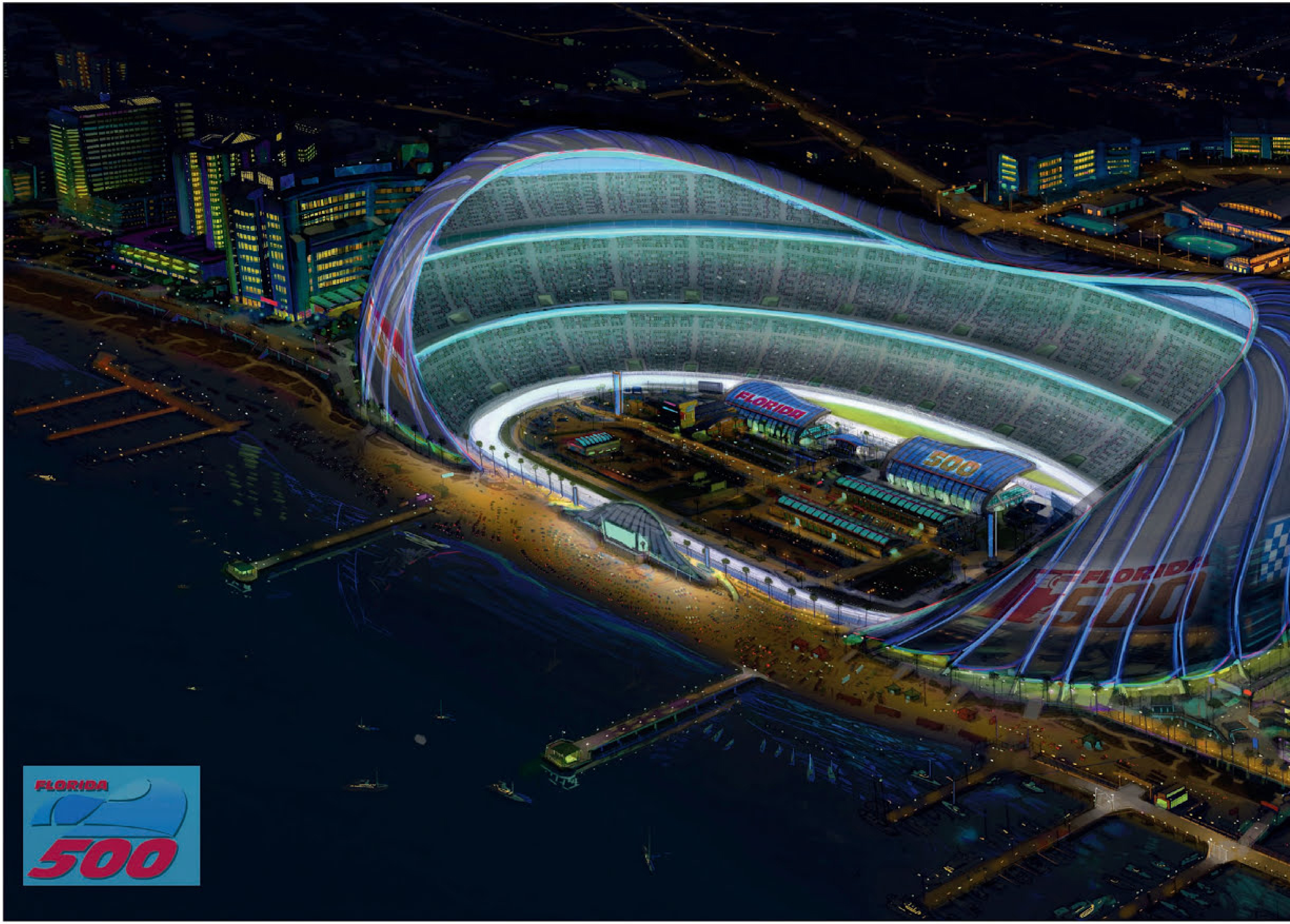
OVER HANG DETAIL

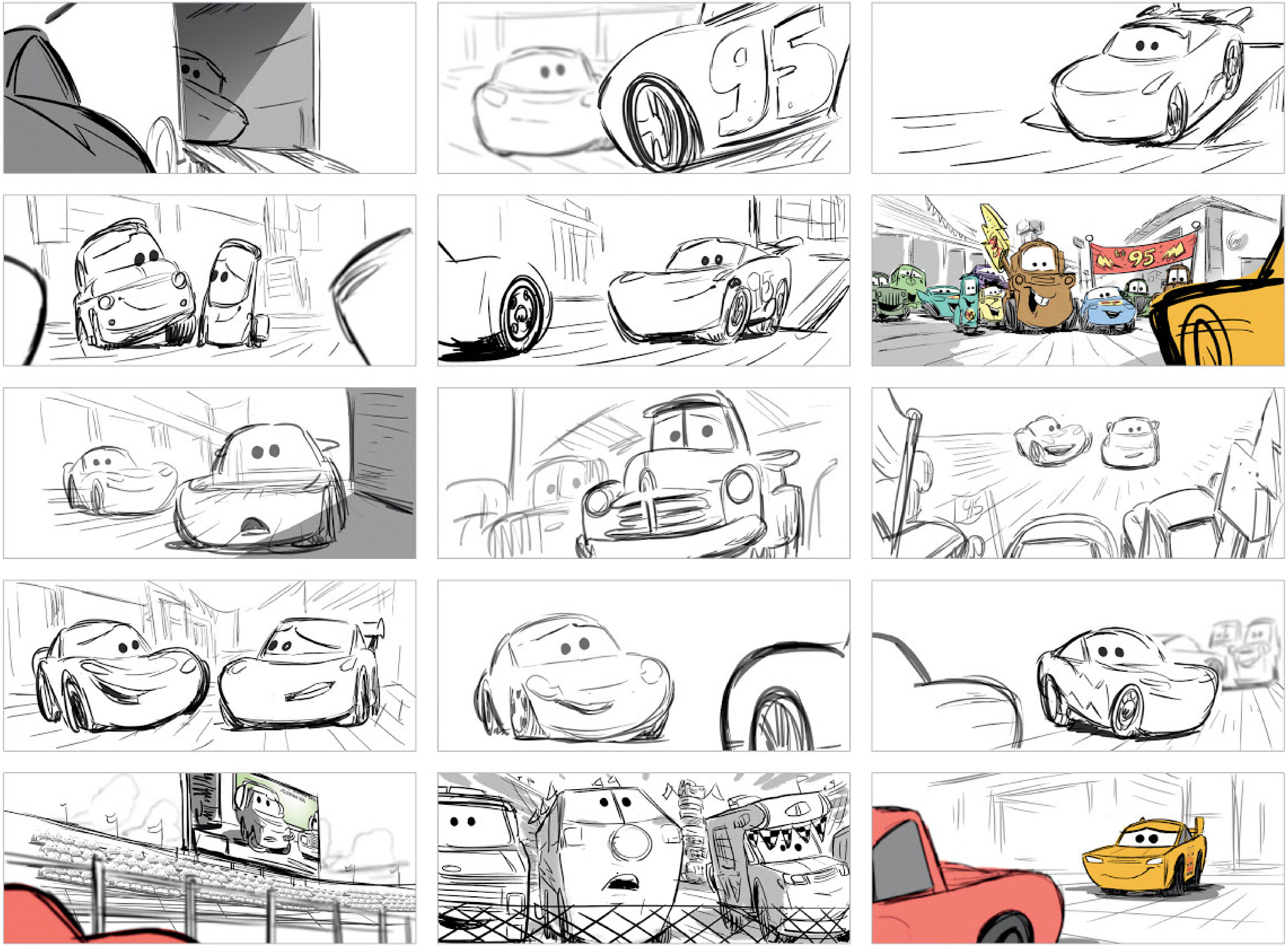


Jumbotron and Access Tunnels.



same treatment as
infield stands.
Render: 11.75 ms (85.11 FPS)
Camera: Free


FLORIDA
500
FLORIDA
500
FLORIDA
500



JP VINE, SCOTT MORSE, TONY ROSENAST Storyboards

DELETED SCENE: THE NEW 95

For Cruz, this is the first time she's been challenged in a real race, and it's overwhelming. I wanted to show how a mentor can inspire someone when they've almost given up. McQueen is that for Cruz. This moment is about how important his mentorship and friendship is to her, and how a veteran can inspire a rookie to believe in themselves and refuse to give up too easily.

—**LOUISE SMYTHE**, Story Artist

A wise woman once said that there are only two lasting bequests we can hope to give our youth. One of these is roots, the other is wings. In this moment, McQueen has come to a similar realization. Through the development of their relationship, McQueen has given Cruz a connection to the roots of racing, and it is now that McQueen has come to a point where he understands what it is he needs to do next: Give her his number 95—the wings that will allow her to fly.

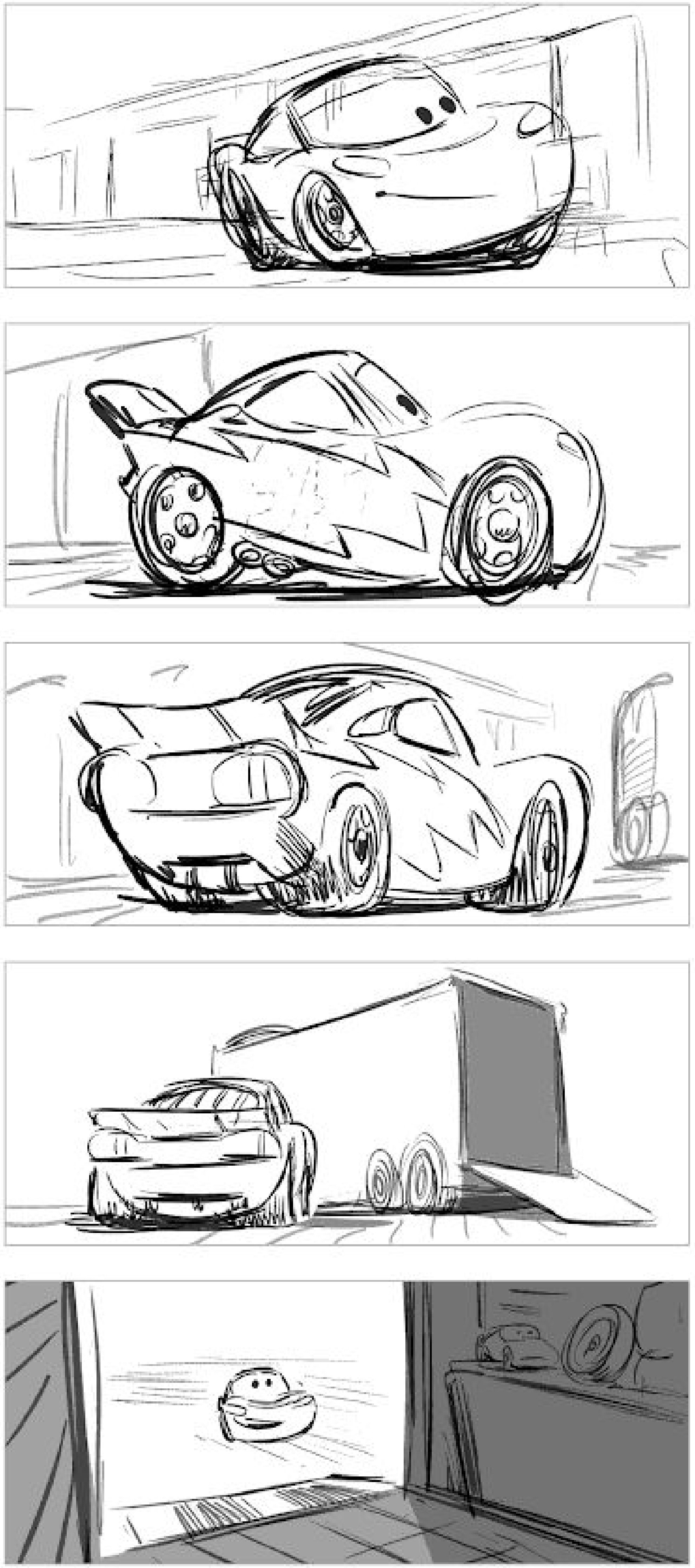
—**TONY ROSENAST**, Story Artist

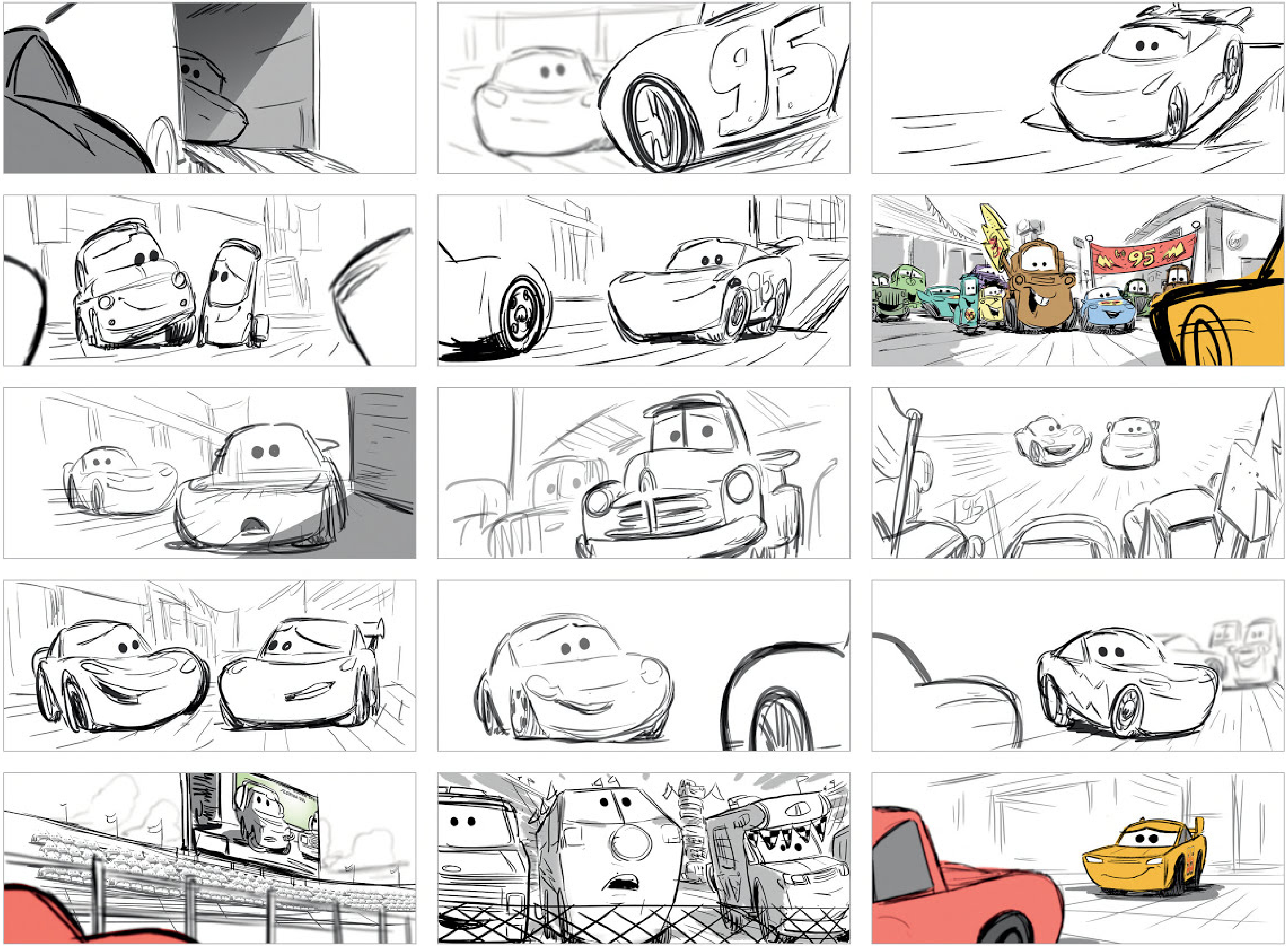
In earlier versions of the story, this sequence was an angry confrontation between a frustrated McQueen and a confused Cruz. It was especially tricky for me to stage two cars talking directly to one another and make it interesting. I tried to have McQueen dominate the space early and have the camera favor him, but slowly bring the camera around and make the two cars more equal as the scene progressed. Finally I brought the camera up above both of them to highlight how each of them were alone (in this version Sterling had fired McQueen and in protest Cruz had quit). This moment really brought the two cars together, where McQueen and Cruz finally understand and appreciate one another.

—**CHRIS ROMAN**, Story Artist

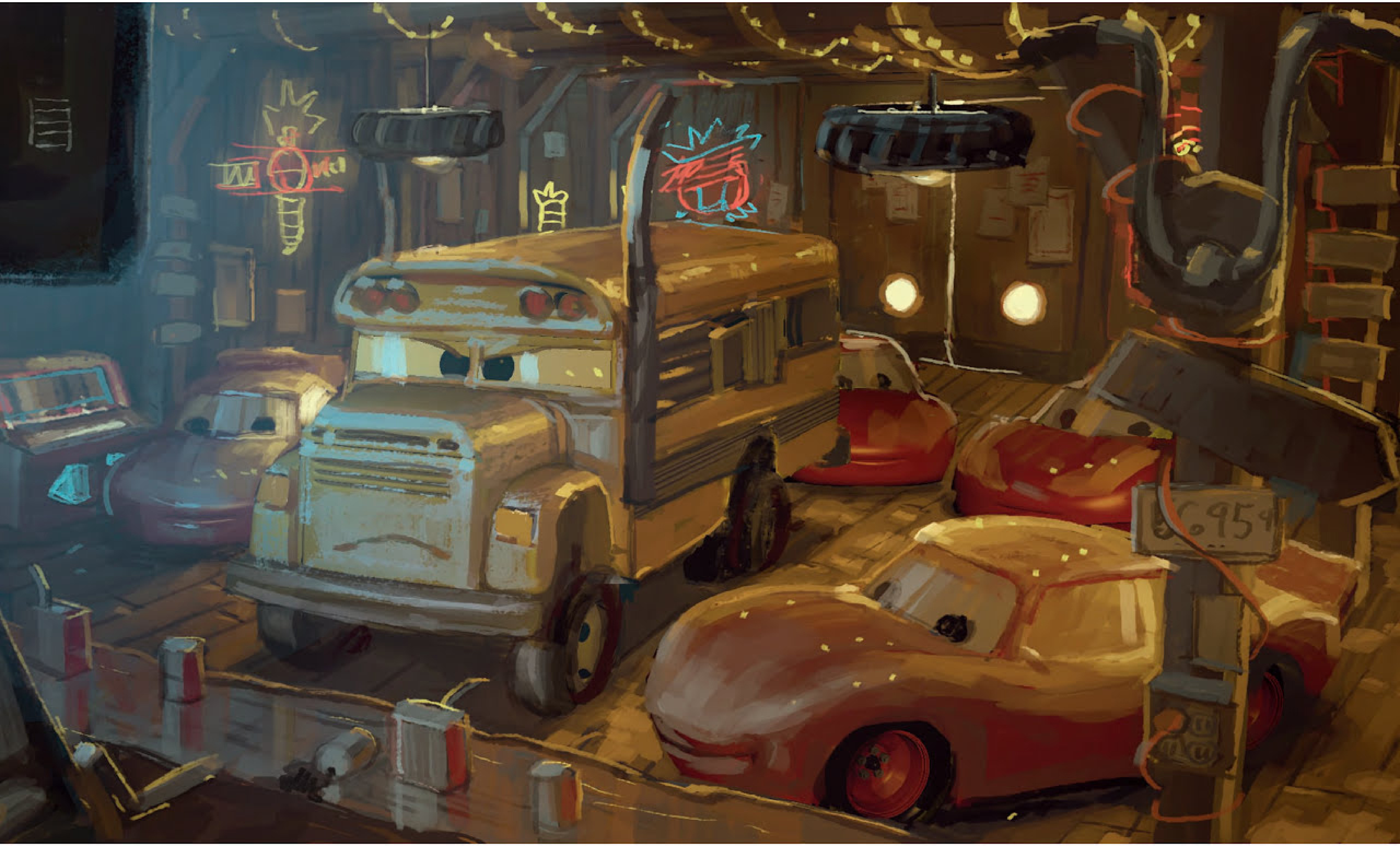
The writing process takes us down many false paths as we find our way to the final film. In early versions, both Cruz and McQueen raced together in the Florida 500, and in another version, depicted here, McQueen gifted Cruz his number 95 offscreen before arriving to Florida, going on to present her as an official racer to his Radiator Springs family. We eventually sensed we needed more tension in Act III and altered moments to play with more suspense.

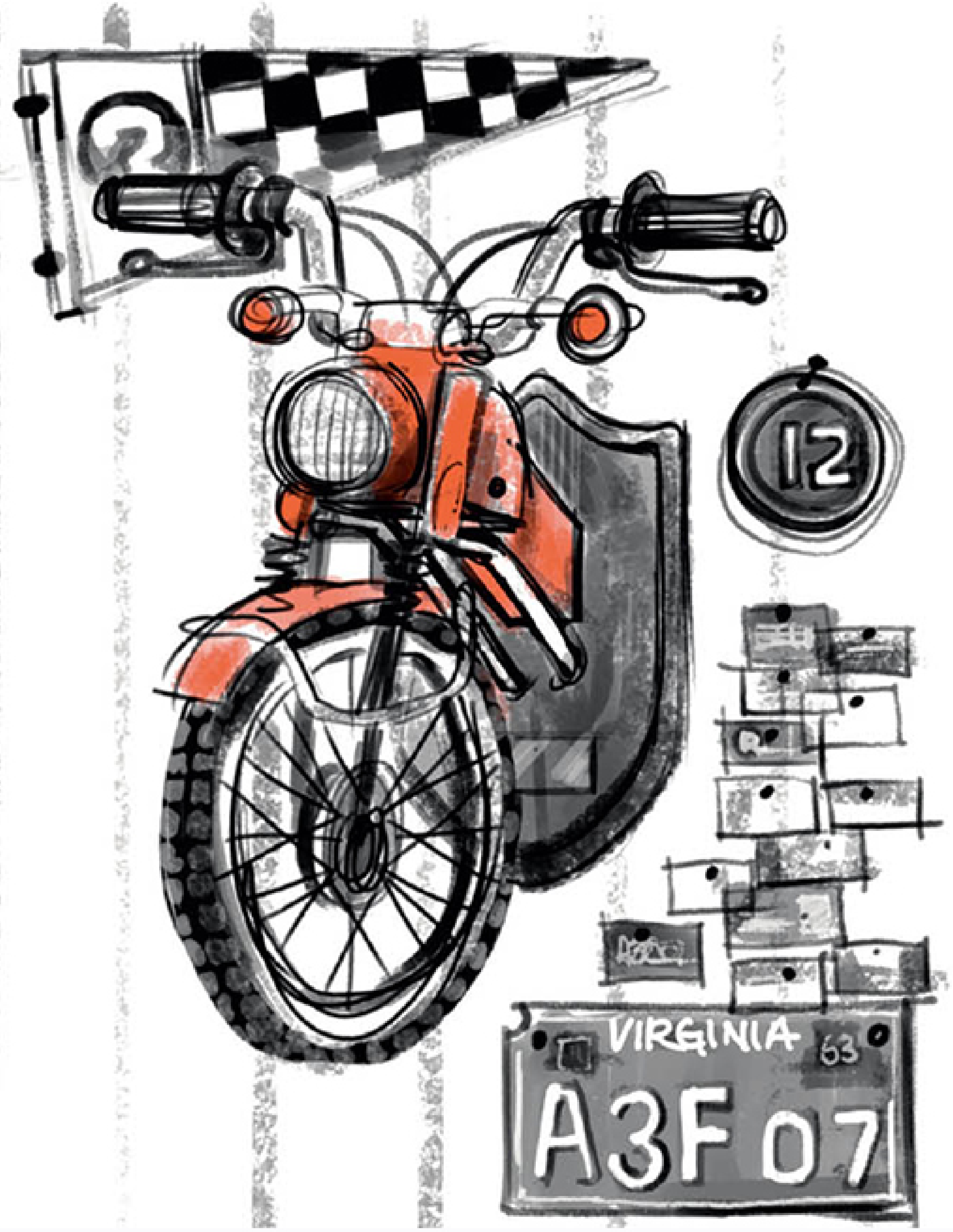
—**SCOTT MORSE**, Story Supervisor



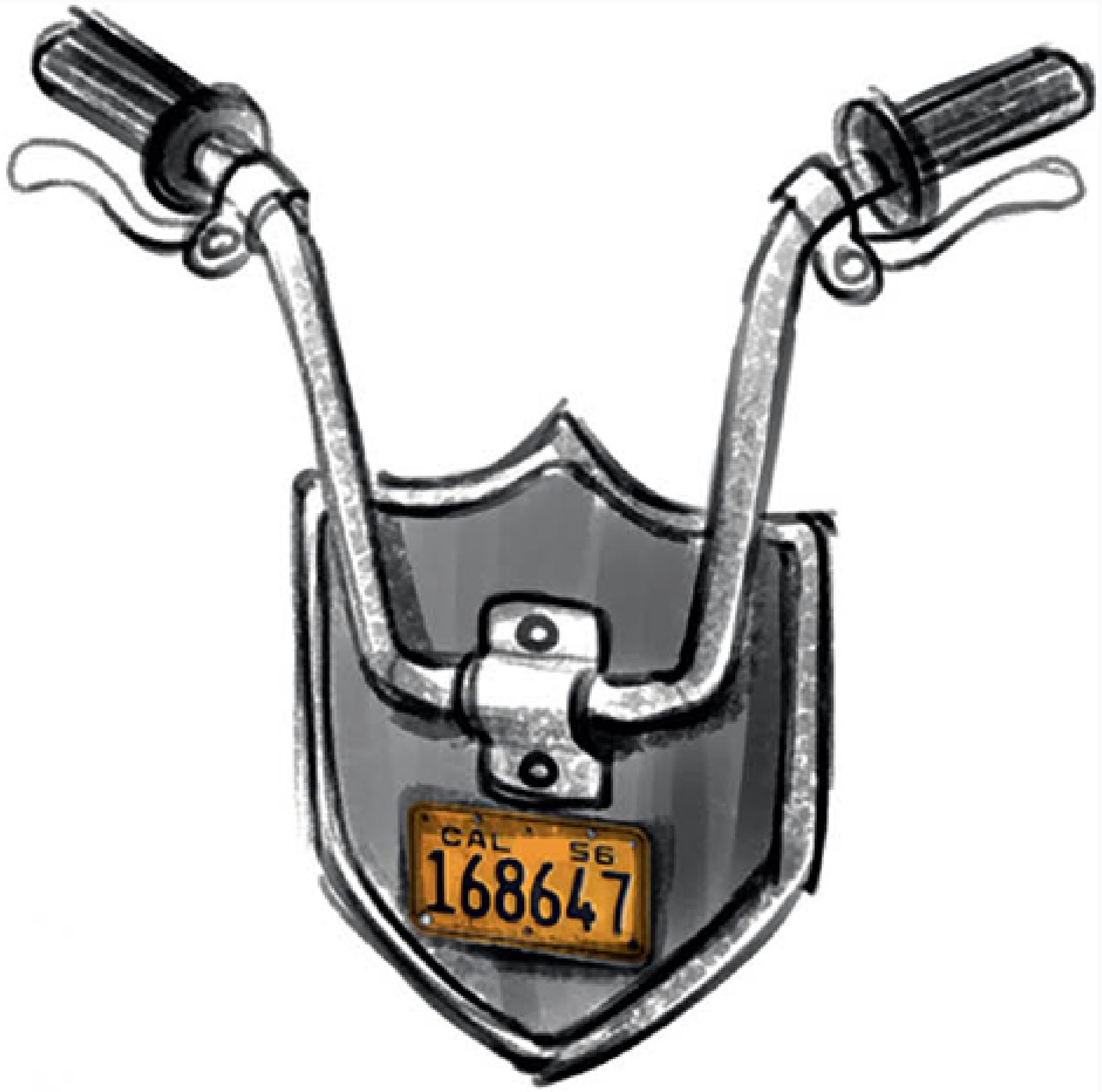


JP VINE, SCOTT MORSE, TONY ROSENAST Storyboards



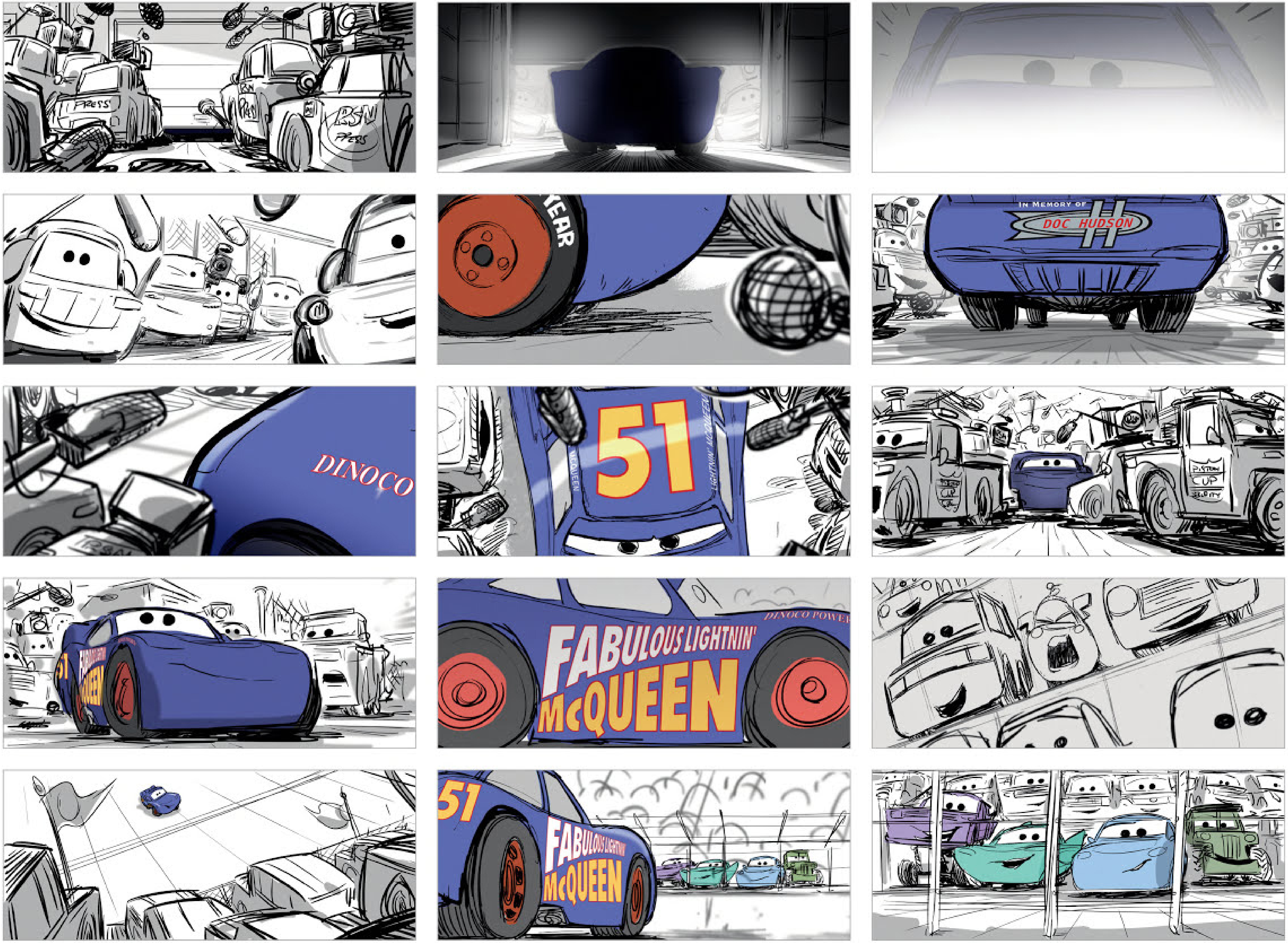


12
VIRGINIA
63
A3F 07

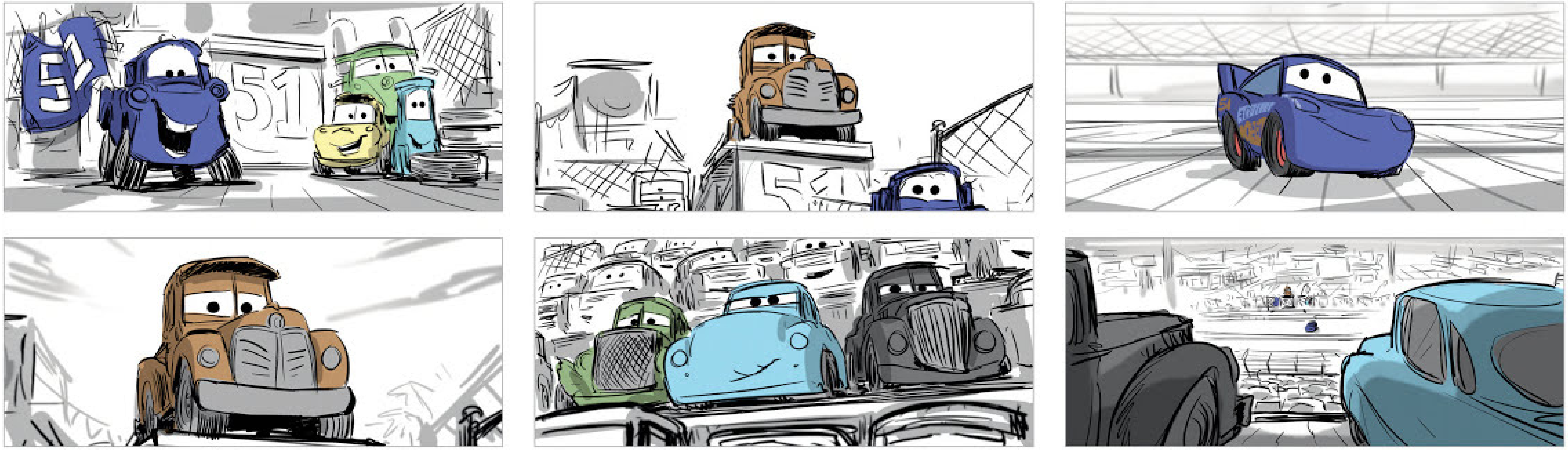


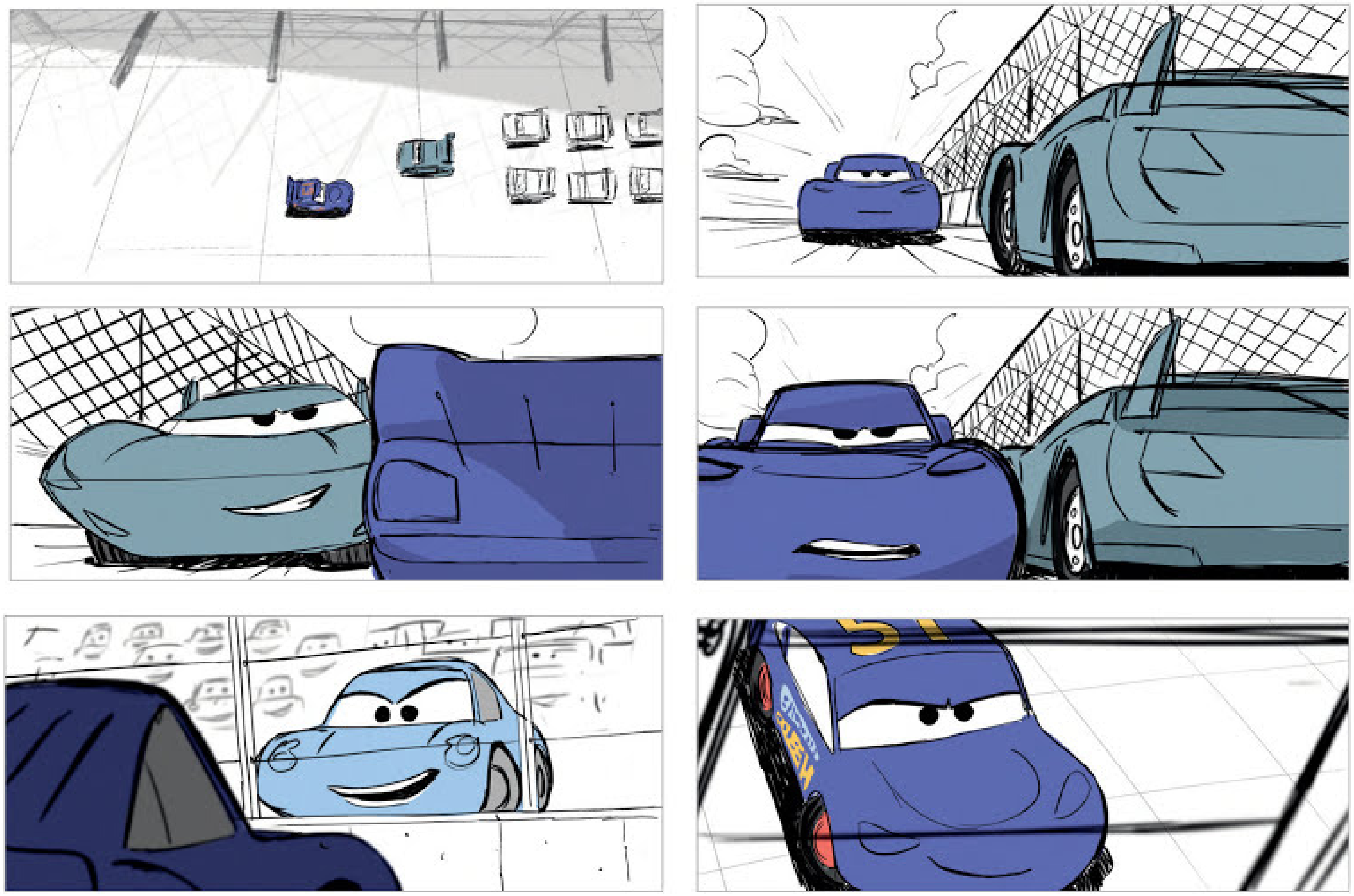
CAL 56
168647

DAN HOLLAND Pencil,


PRESS
RSN
PRESS
IN MEMORY OF
DOC HUDSON
DINOCO
51
McQUEEN
LIGHTNIN' McQUEEN
PISTON CUP
SECURITY
FABULOUS LIGHTNIN'
McQUEEN
DINOCO POWER
51
FABULOUS LIGHTNIN'
McQUEEN

MIKE WU, MICHAEL YATES, SAM HOOD, SCOTT MORSE Storyboards; (opposite) **JP VINE, MIKE WU, MICHAEL YATES, SAM HOOD, SCOTT MORSE** Storyboards

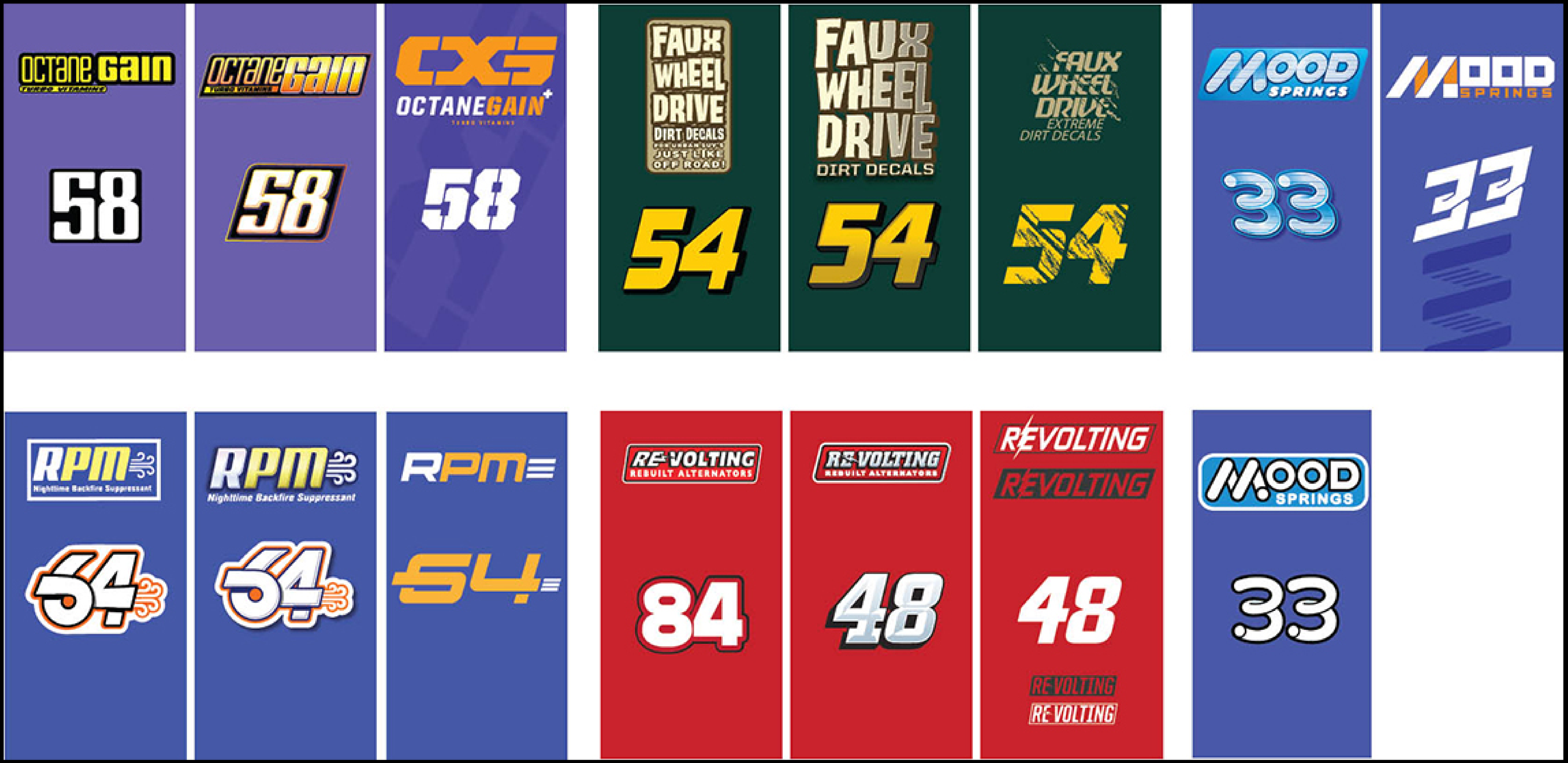




DELETED SCENE: MCQUEEN RETURNS

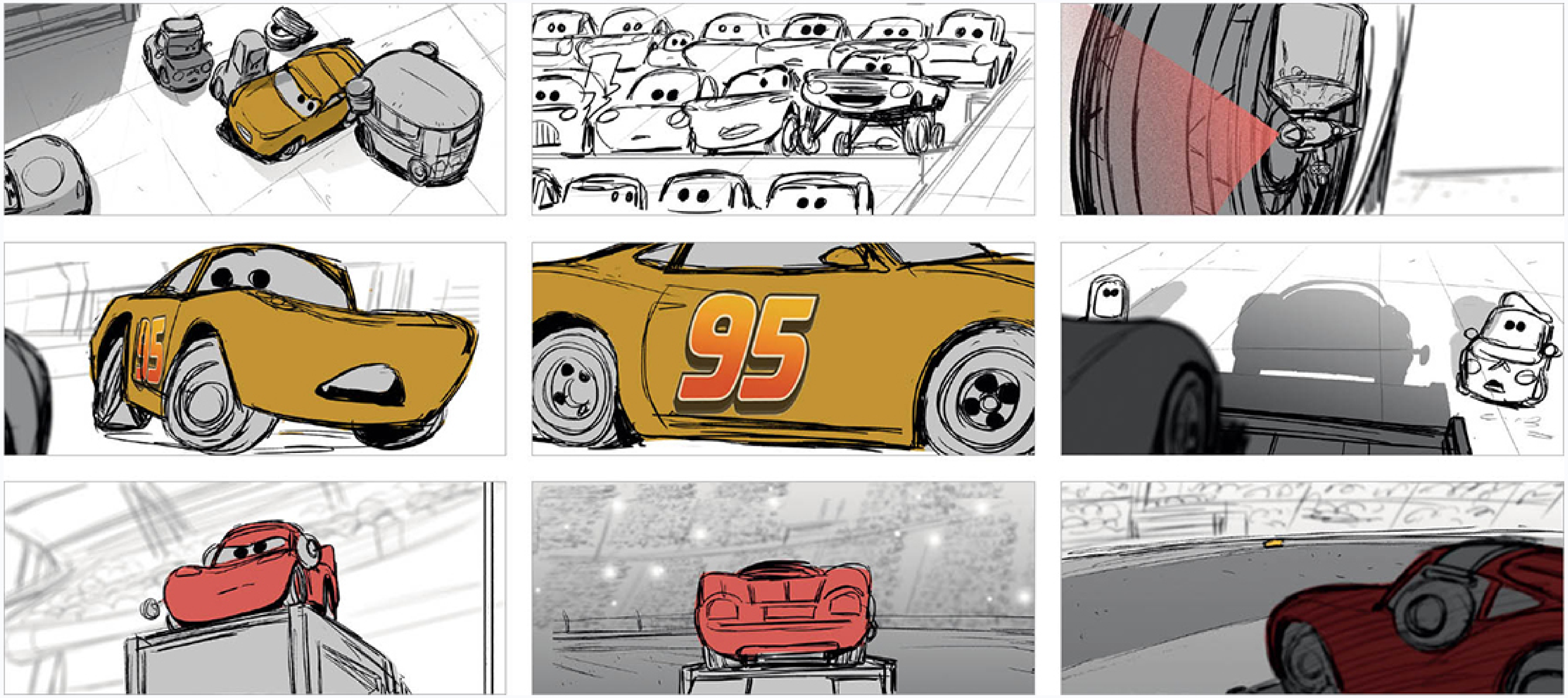
The memory of Doc Hudson plays such an important role in the story. We knew, almost from the beginning, that seeing McQueen in Doc's paint scheme was something to chase. Bringing Doc back to life through his protégé would help us feel the spirit of the old school speaking to a new generation. The idea of seeing Doc's racing career finally come full circle through McQueen held real power in our minds—like putting on your Dad's old letterman jacket.

—**SCOTT MORSE,** Story Supervisor


OCTANE GAIN
TURBO VITAMINS
58
OCTANE GAIN
TURBO VITAMINS
58
CXG
OCTANEGAIN+
TURBO VITAMINS
58
FAUX WHEEL DRIVE
DIRT DECALS
FOR URBAN SUV'S JUST LIKE OFF ROAD!
54
FAUX WHEEL DRIVE
DIRT DECALS
54
FAUX WHEEL DRIVE
EXTREME DIRT DECALS
54
MOOD SPRINGS
33
MOOD SPRINGS
33
RPM
Nighttime Backfire Suppressant
64
RPM
Nighttime Backfire Suppressant
64
RPM
64
RE-VOLTING
REBUILT ALTERNATORS
84
RE-VOLTING
REBUILT ALTERNATORS
48
REVOLTING
REVOLTING
48
RE-VOLTING
RE-VOLTING
MOOD SPRINGS
33

DINOCO
51
FABULOUS LIGHTNING McQUEEN
LIGHTYEAR

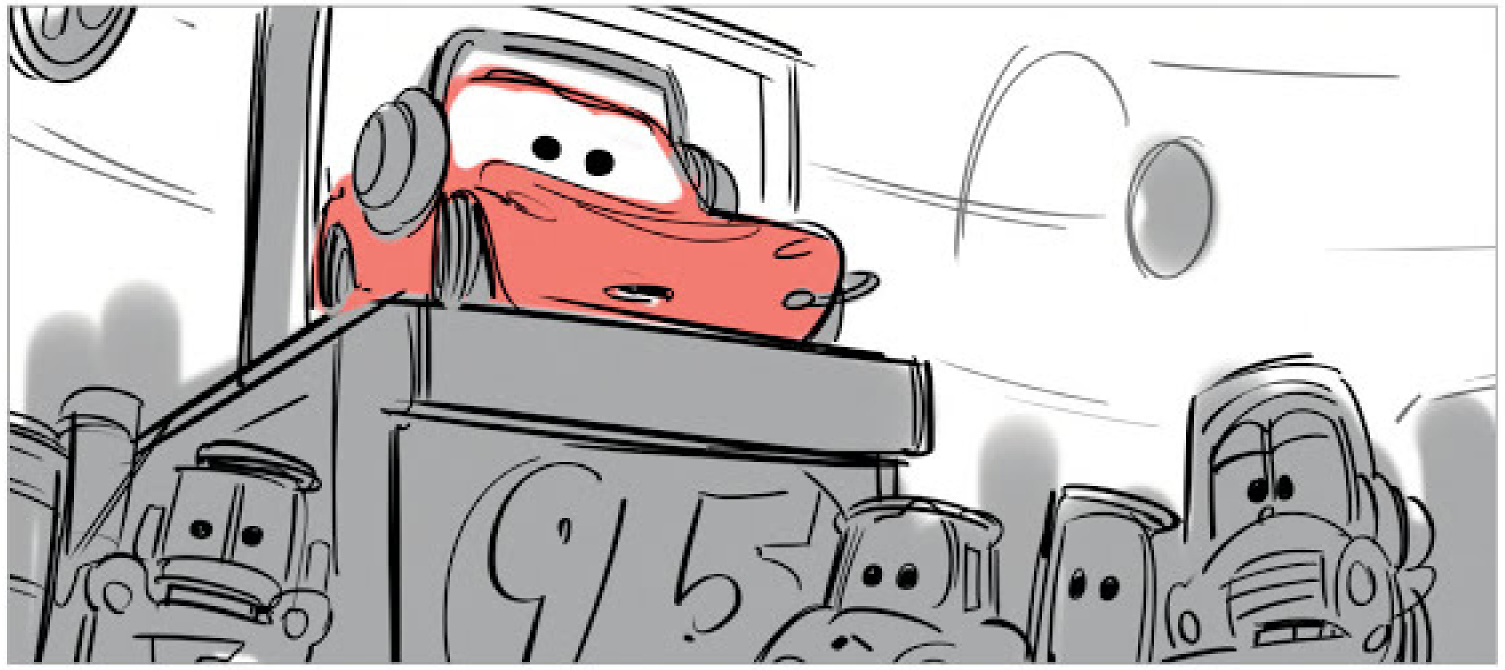
51
FABULOUS LIGHTNING McQUEEN
LIGHTYEAR

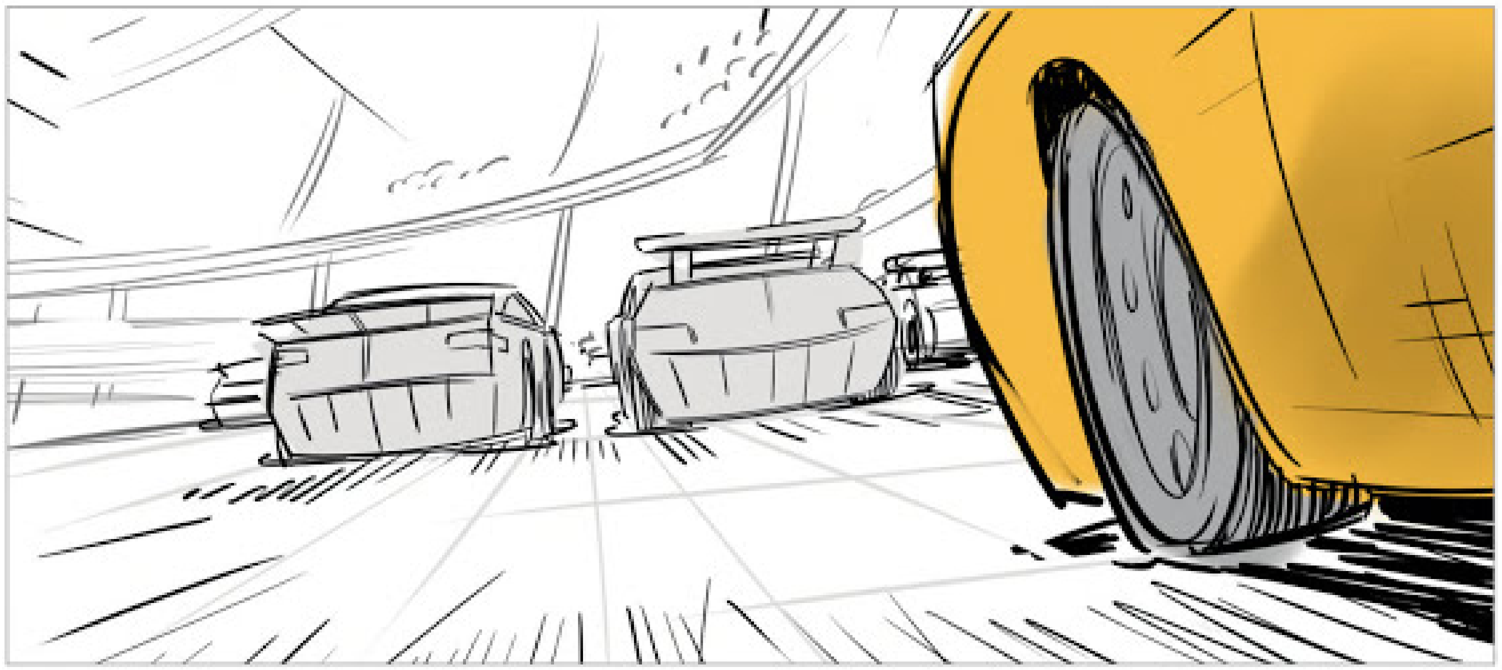

95
95

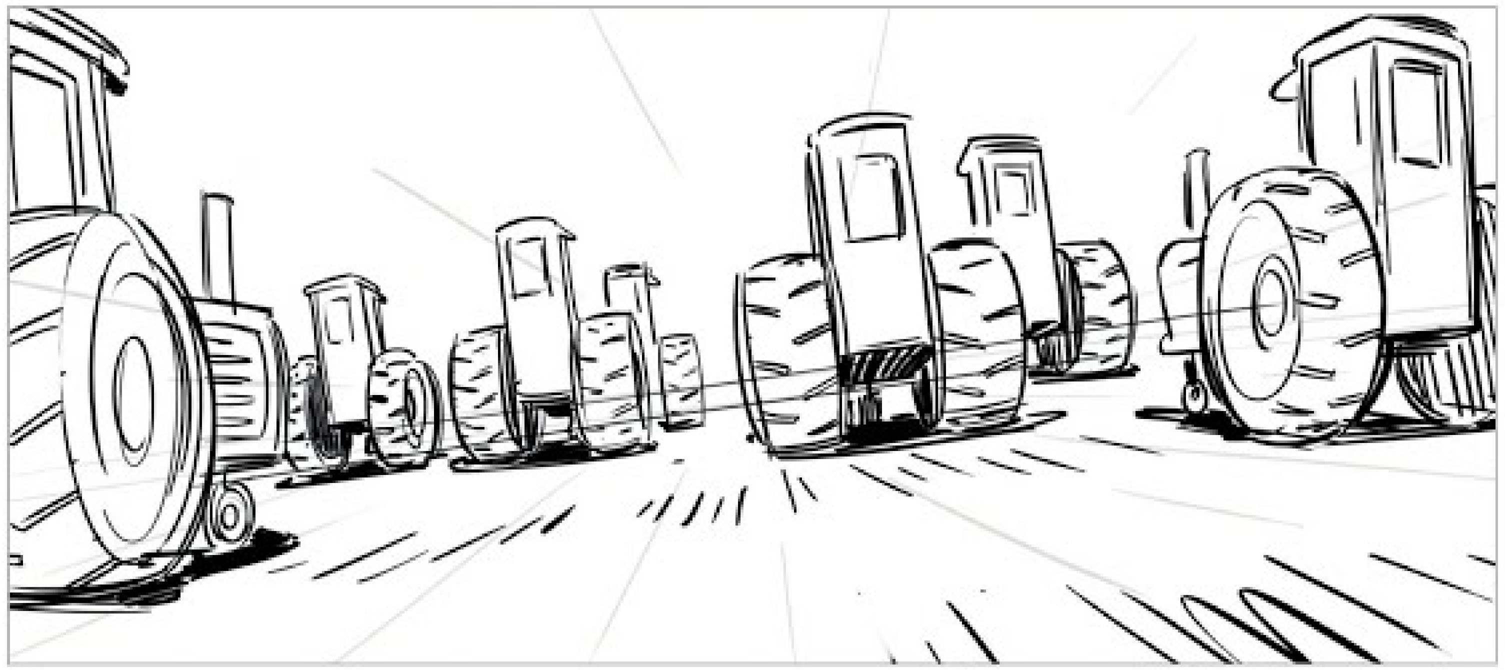
FLORIDA SPEEDWAY RACE

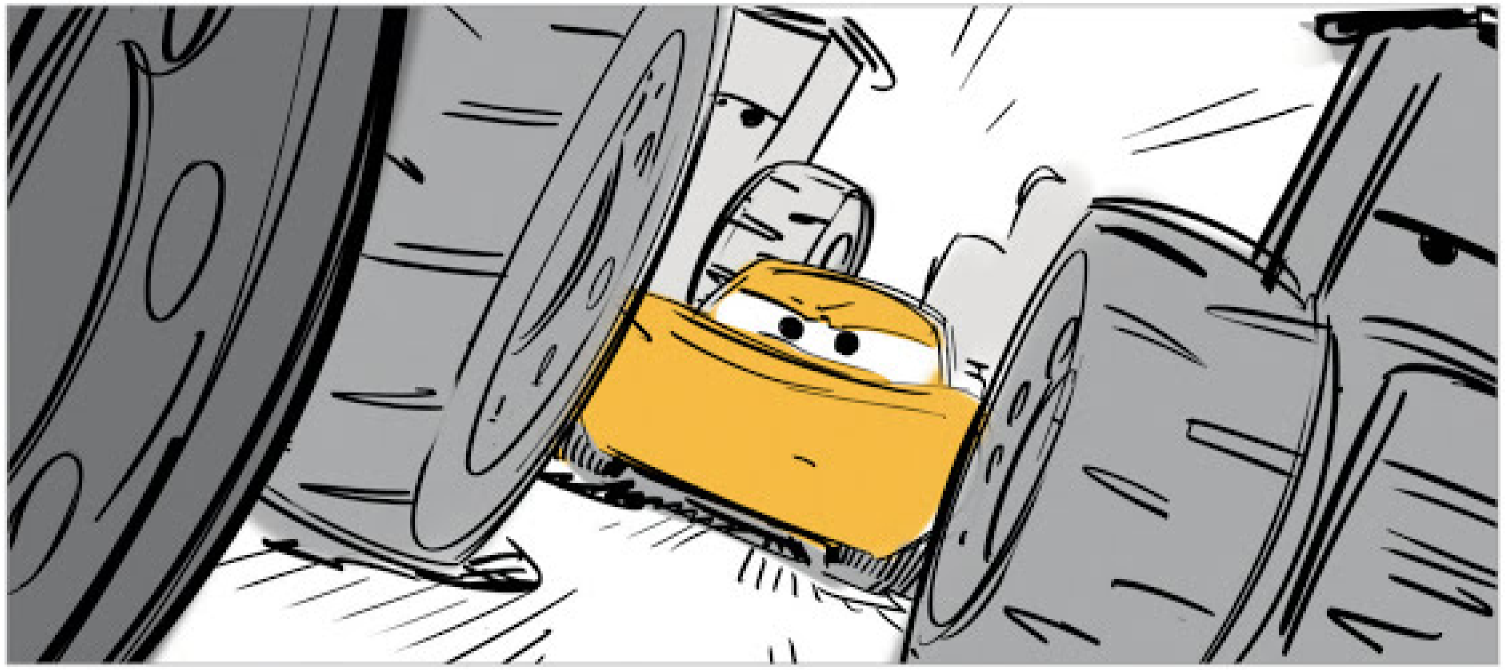
There have been multiple versions of this race: Cruz in the race, Cruz not in the race. McQueen wins, Cruz wins. Story is exploration, and if you do enough, you hopefully land on the right idea. Cruz executing Doc's move is the culmination of everything she and McQueen have learned over the course of the film. Also, it's cool. McQueen may not win the race, but he does find a deeper satisfaction through mentoring Cruz.

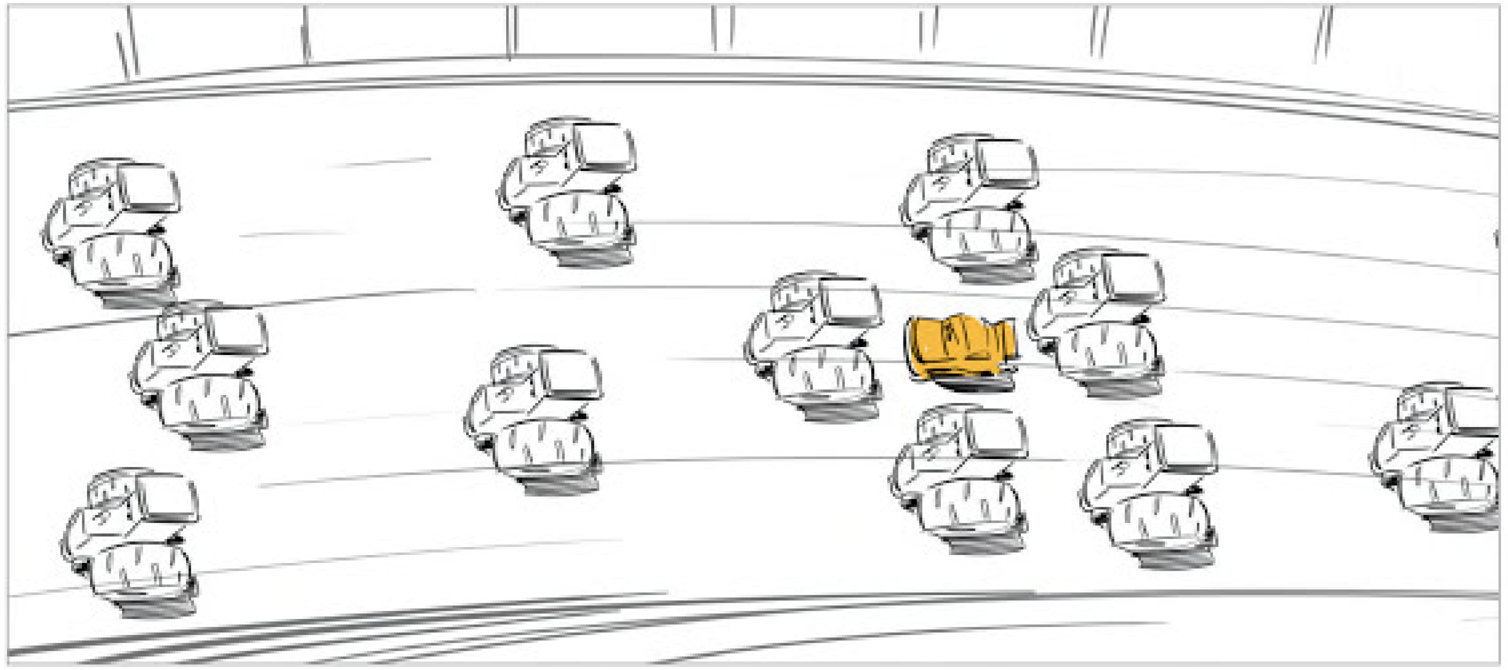
—**JOHN HOFFMAN,** Story Artist



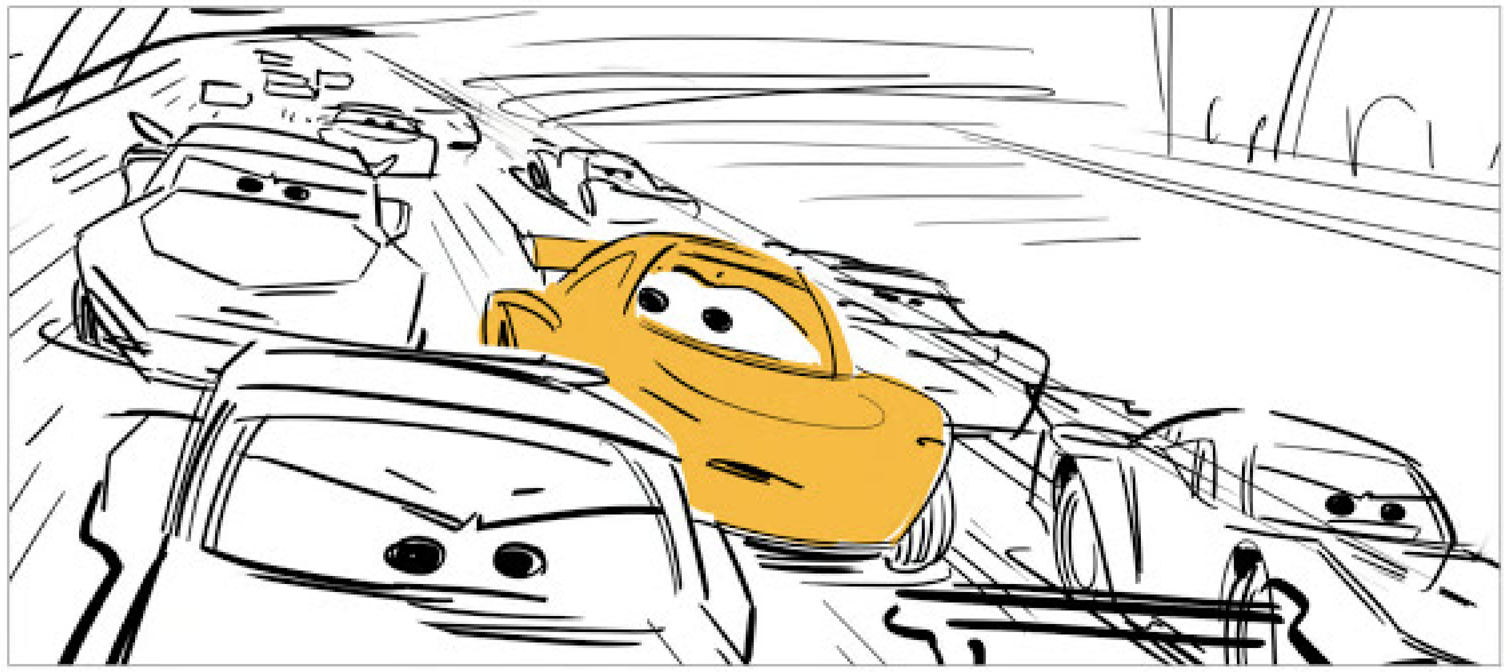


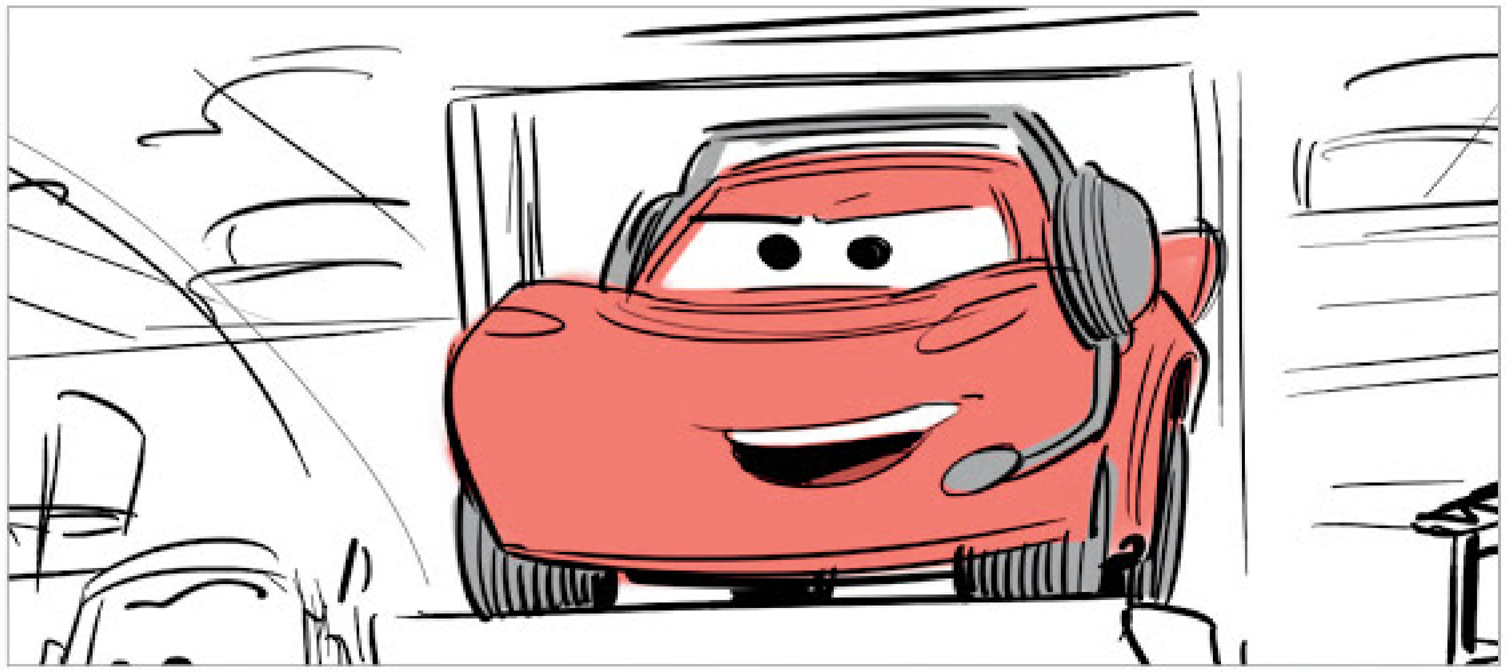


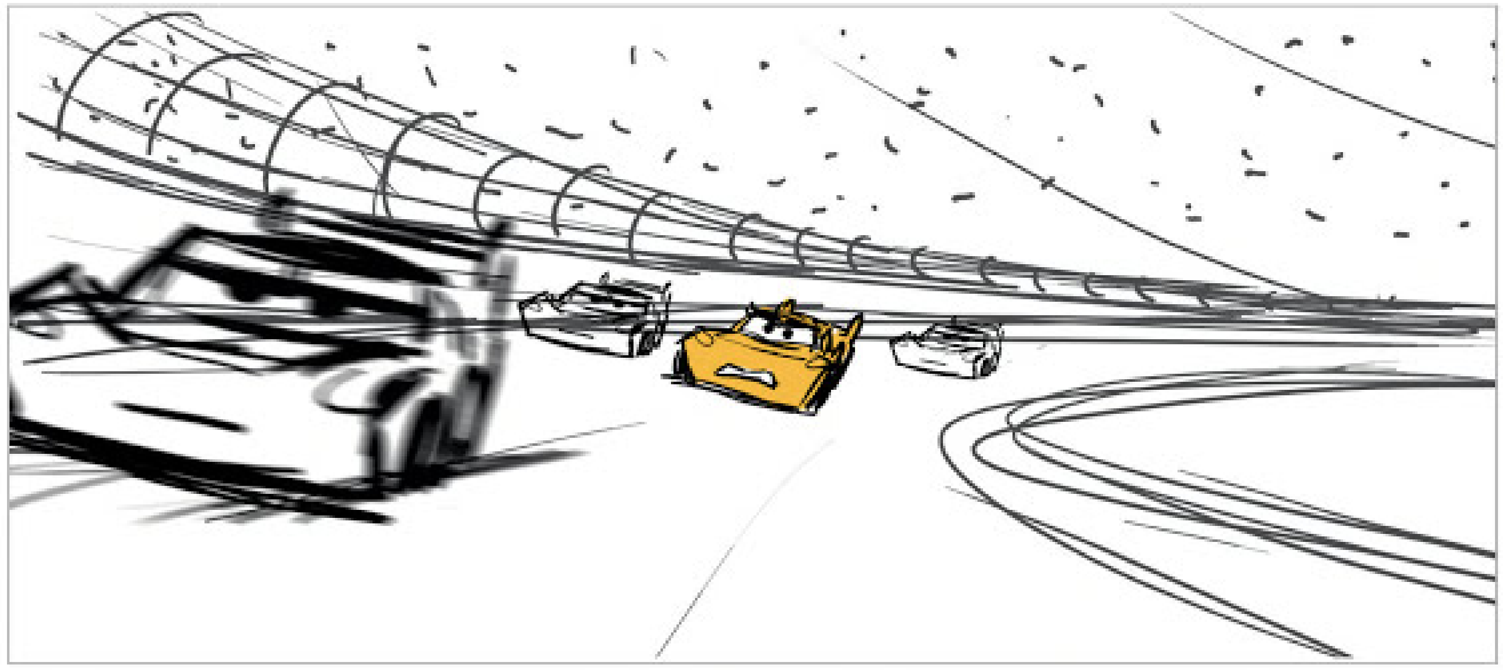


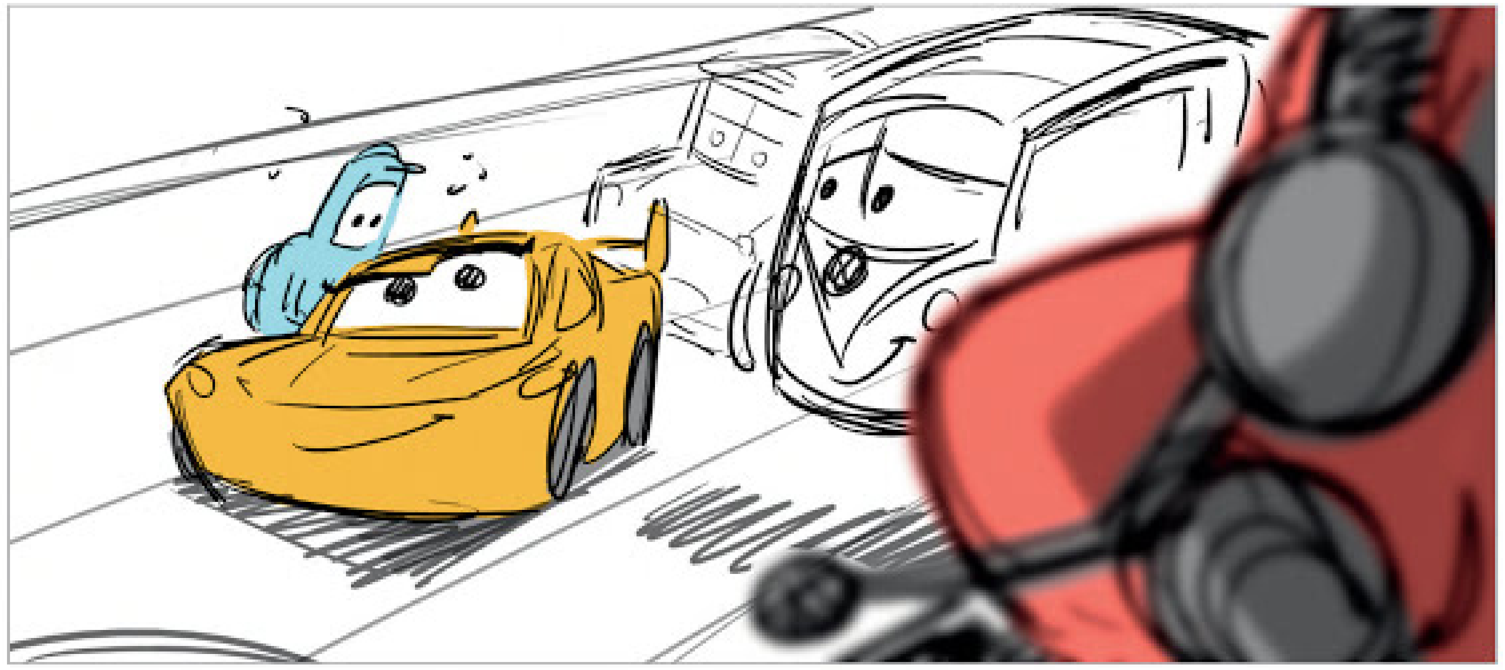


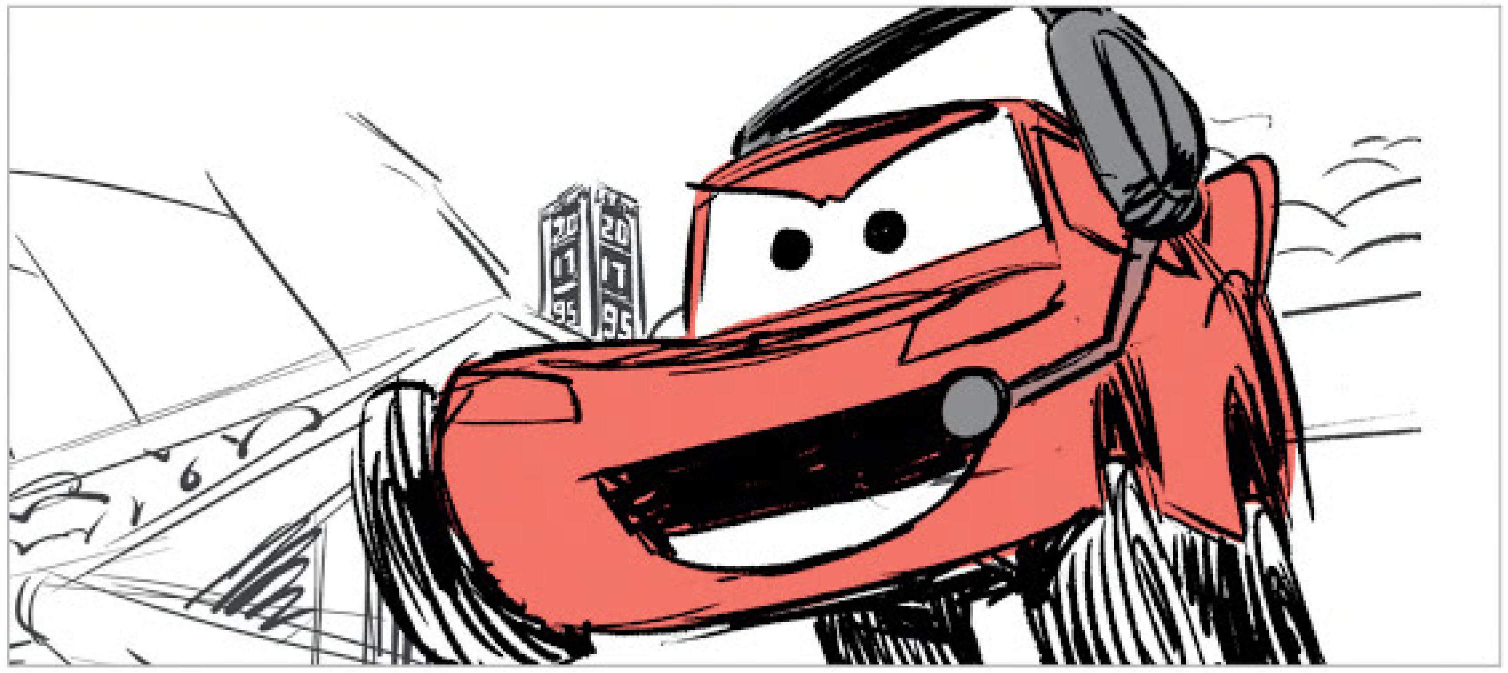
MICHAEL DALEY, LOUISE SMYTHE, AND JOHN HOFFMAN Storyboards

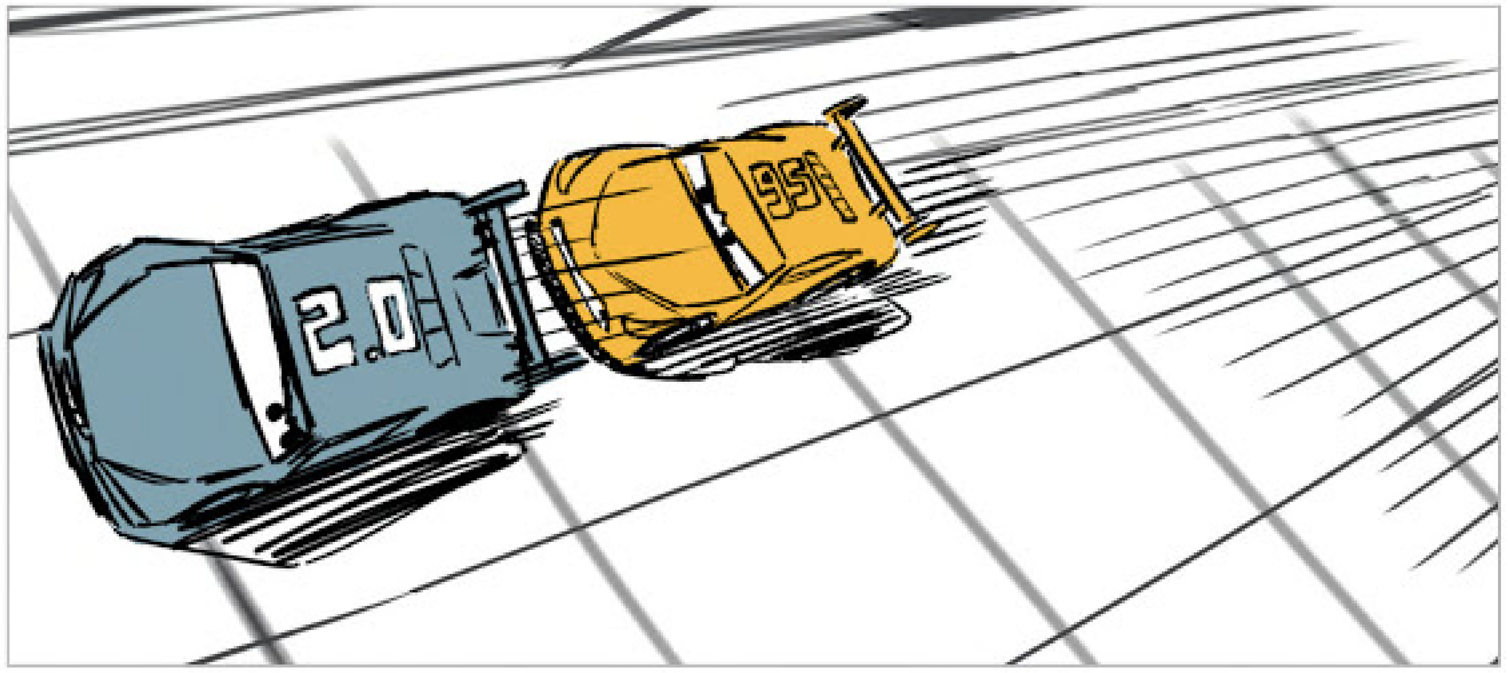


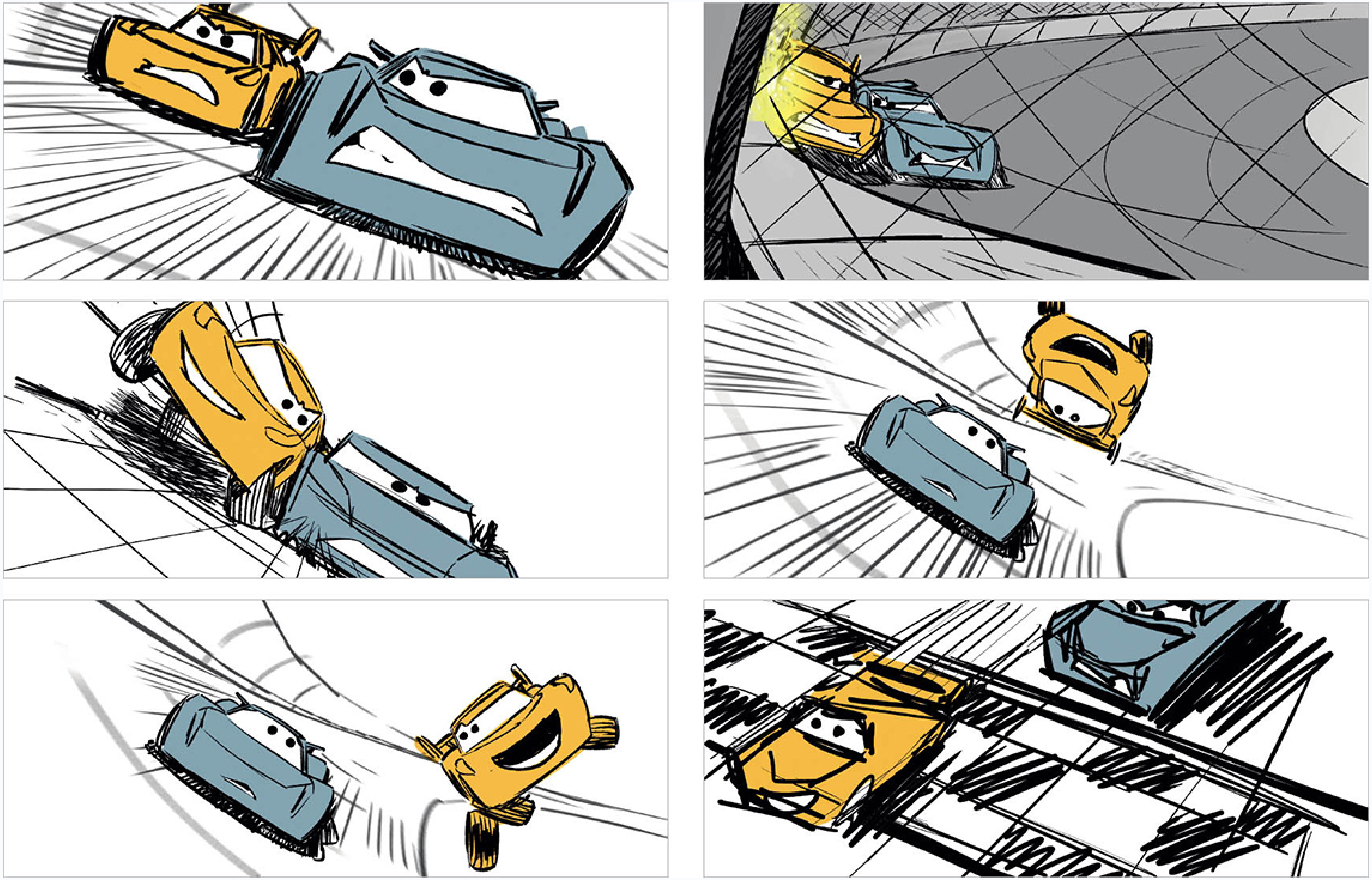




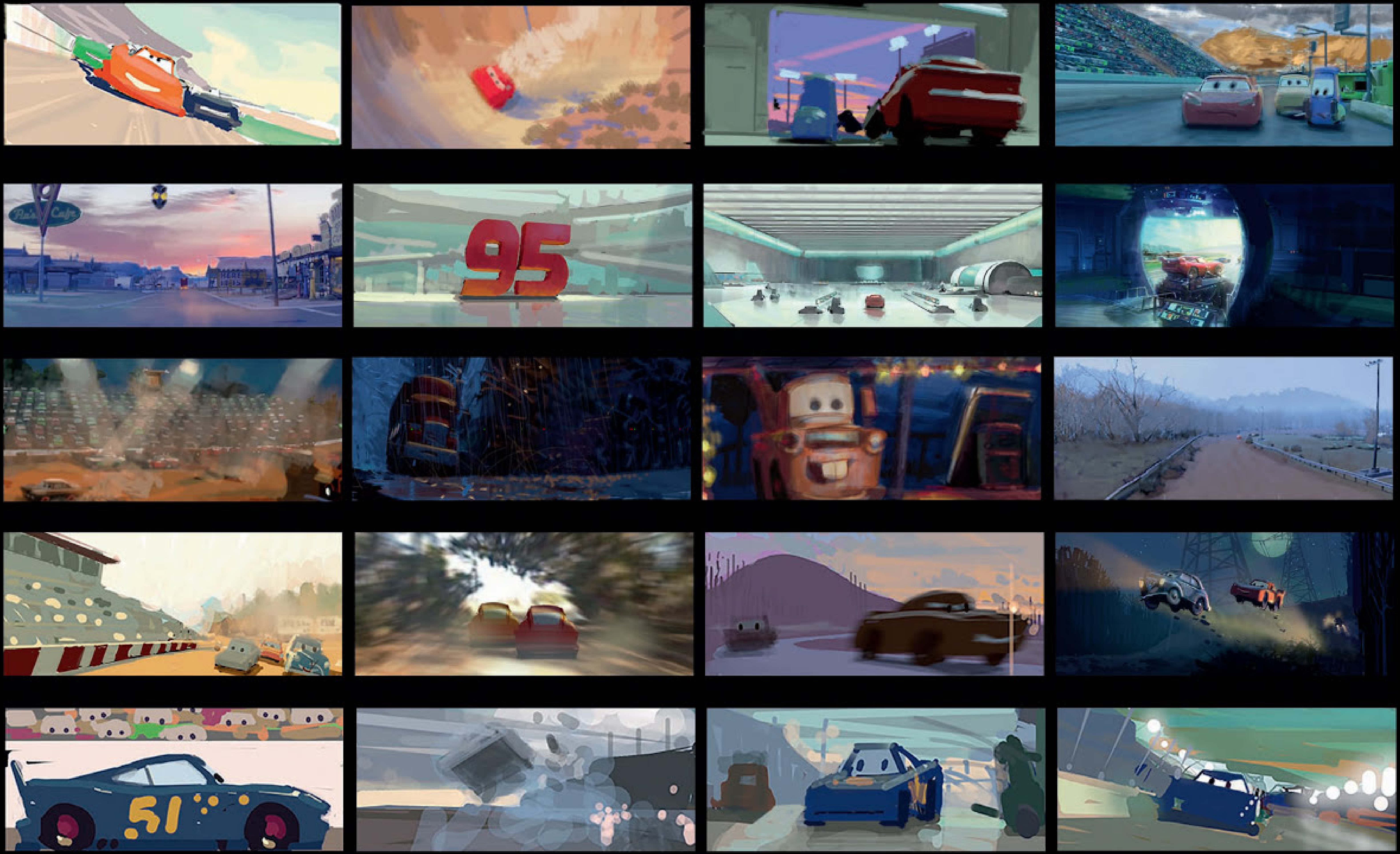



20
17
95

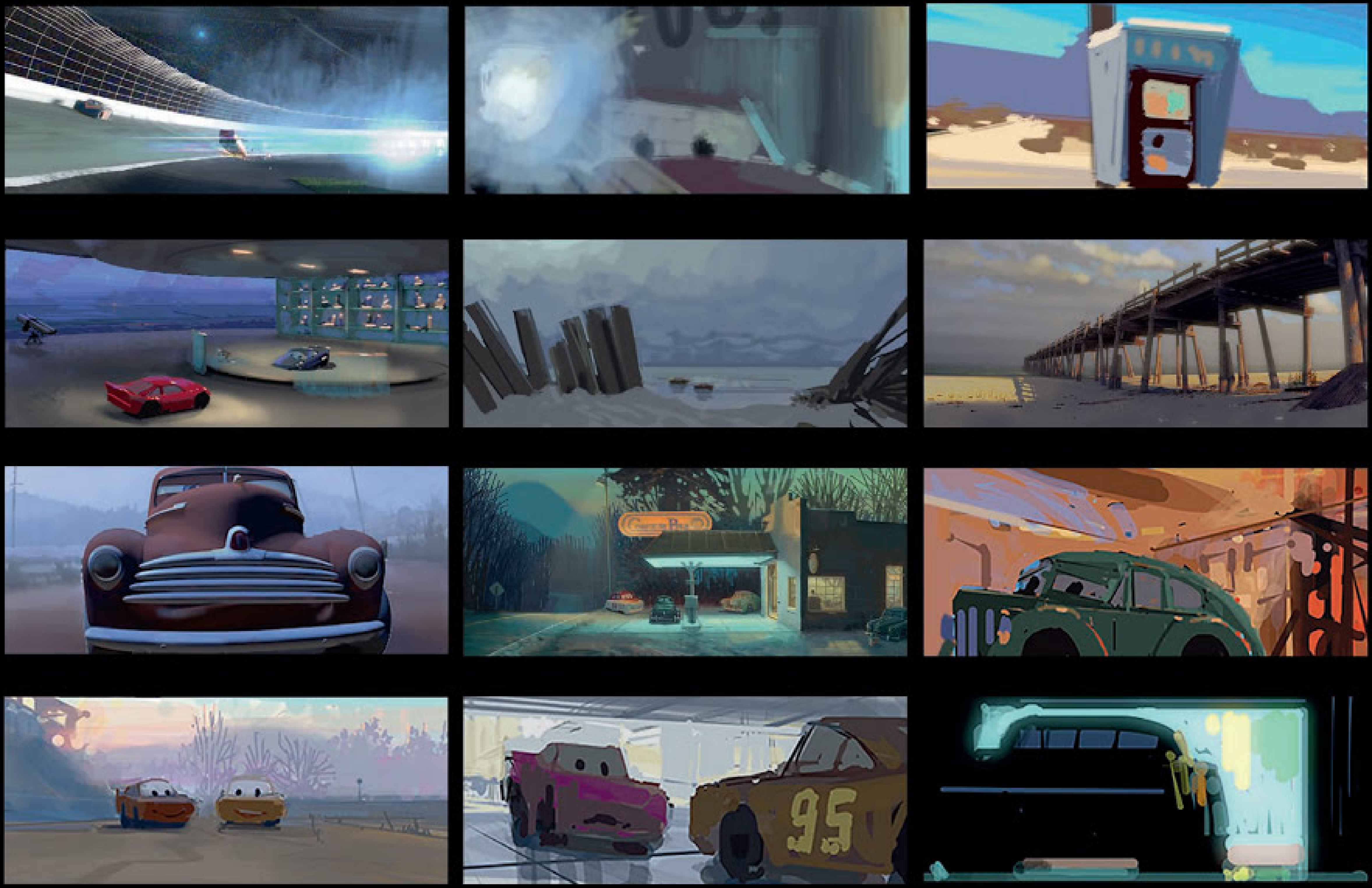

2.0
95

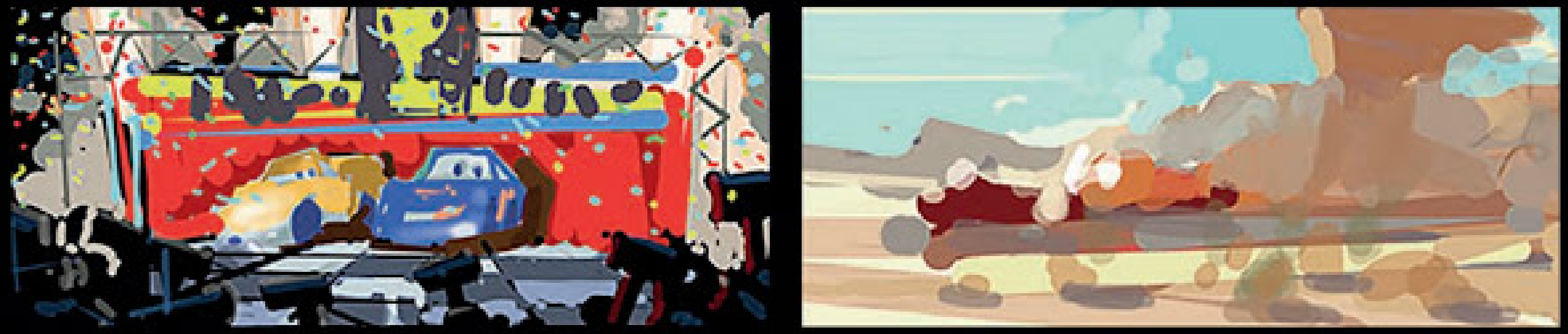


JOHN HOFFMAN Storyboard, (opposite) **KRISTIAN NORELIUS** Digital



BILL CONE Digital





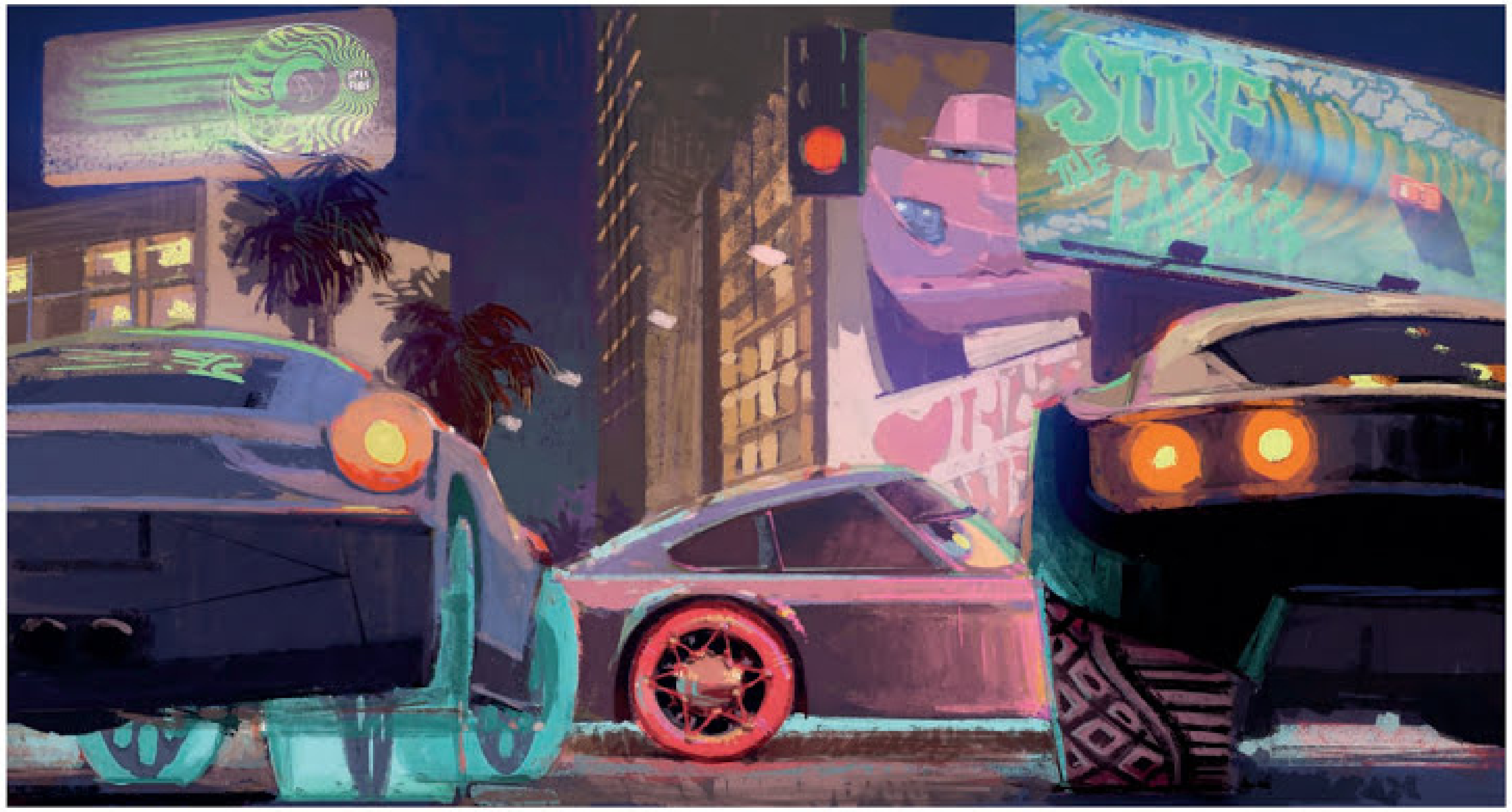
A color script serves a variety of purposes during the course of a project. As it encompasses the entire film, the overall picture of color thinking can be referred to in one document, whether in development or production. Functioning initially as a testbed of visual ideas, and their potential dynamic relationship, it ideally evolves to become a stable road map of key color motifs that thematically, emotionally, and practically are tied to the narrative. In practice, it is often a perpetual work-in-progress, modified to reflect changes in the story, as warranted. This document helps guide the production of master lighting keys as production moves forward.

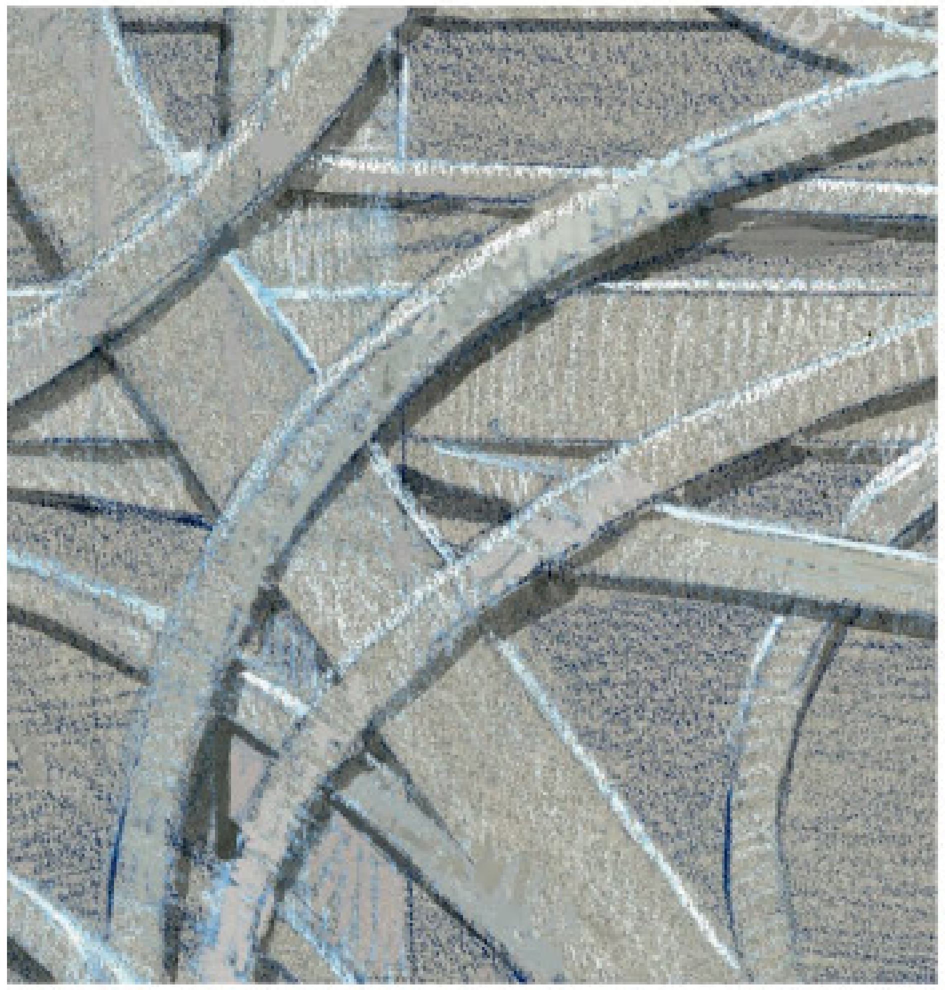
—**BILL CONE,** Production Designer

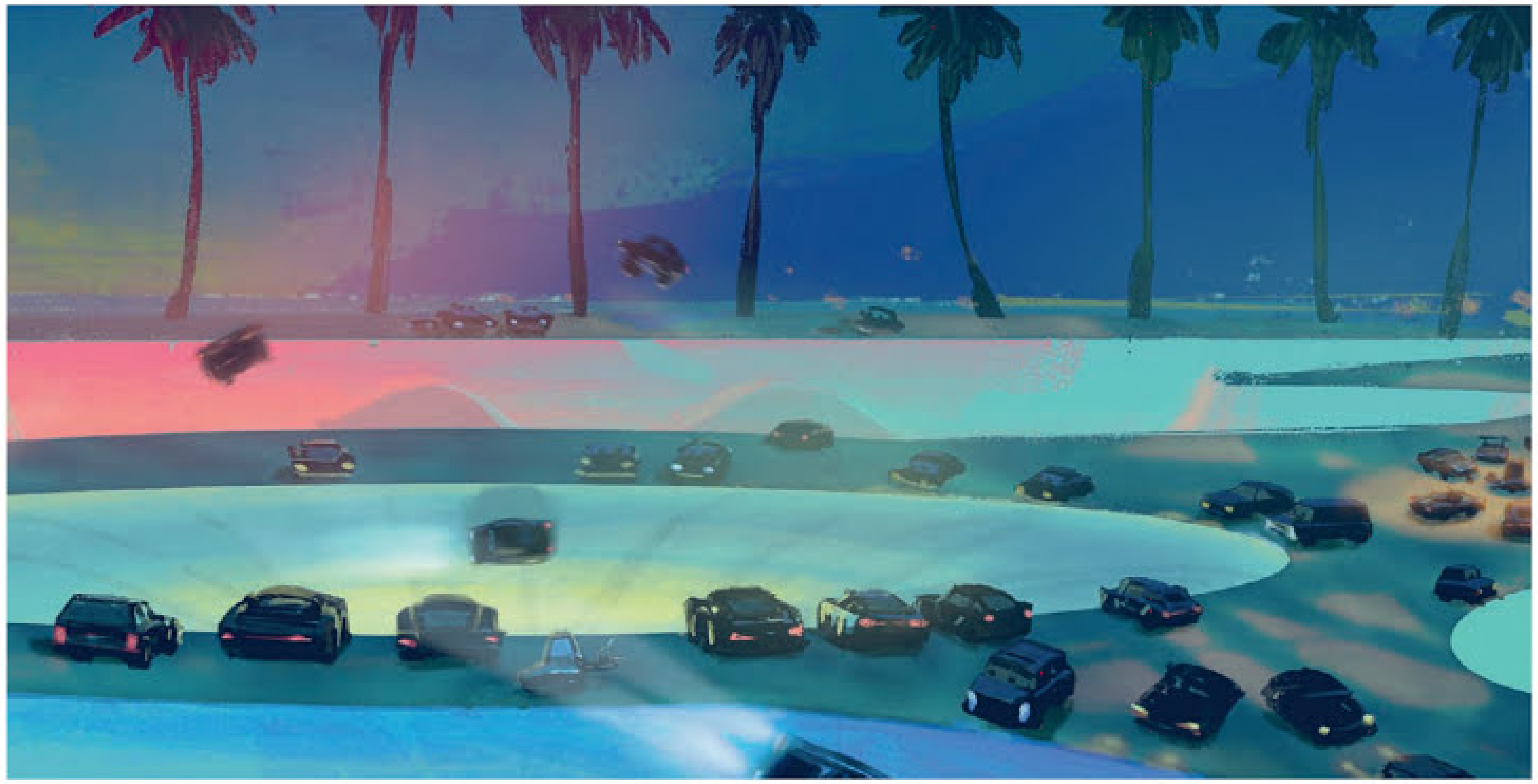
OUTTAKES

Most of our films take a few turns in story and design on the way to the finish line, and this one was no exception. The first few years on this project we studied locations in California, including dry lake beds, towns in the valley, and how aspects of Southern California culture, such as celebrity, Hollywood, and skateboarding, could be adapted to a *Cars*-based world.

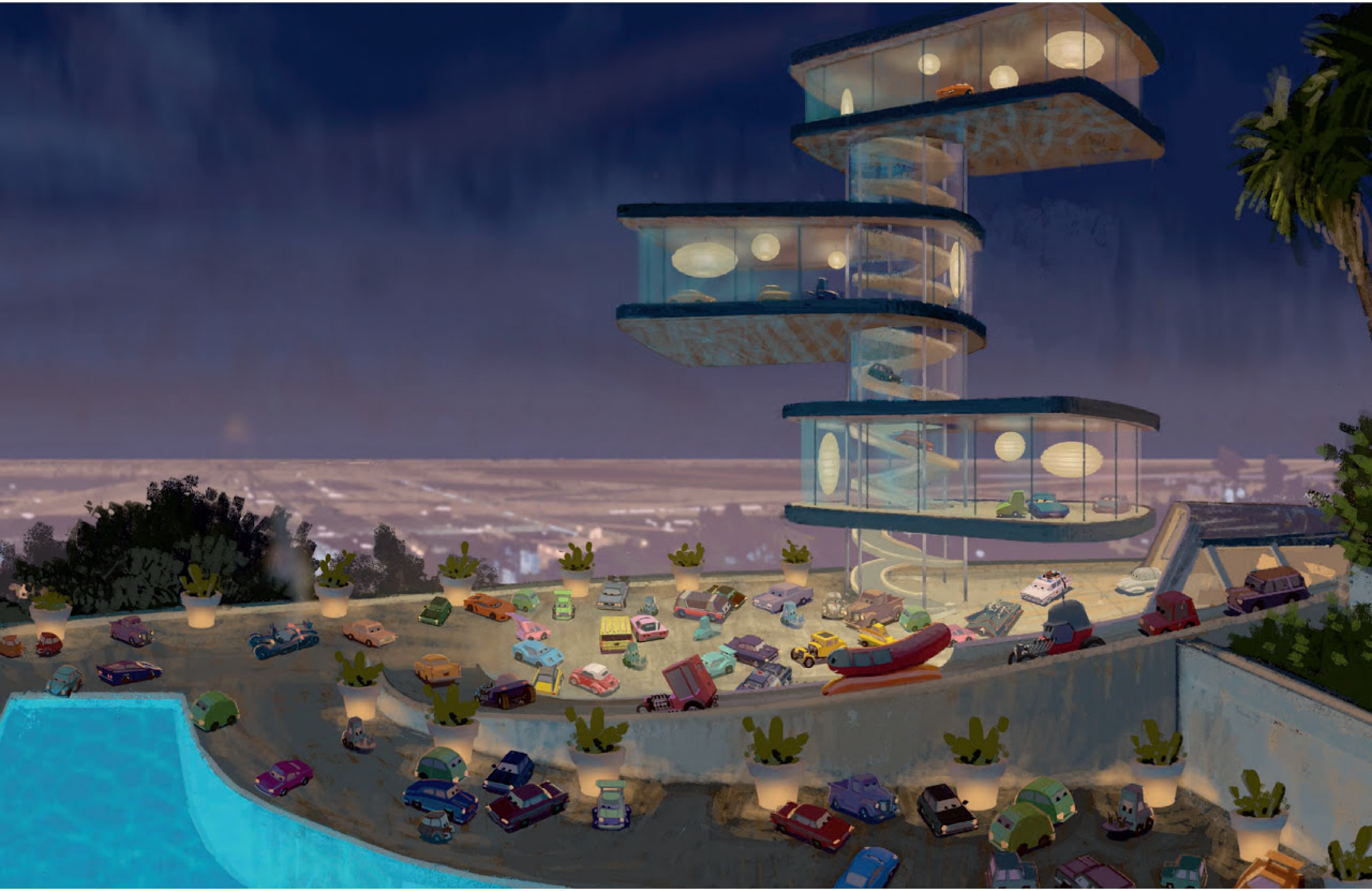
—**BILL CONE**, Production Designer

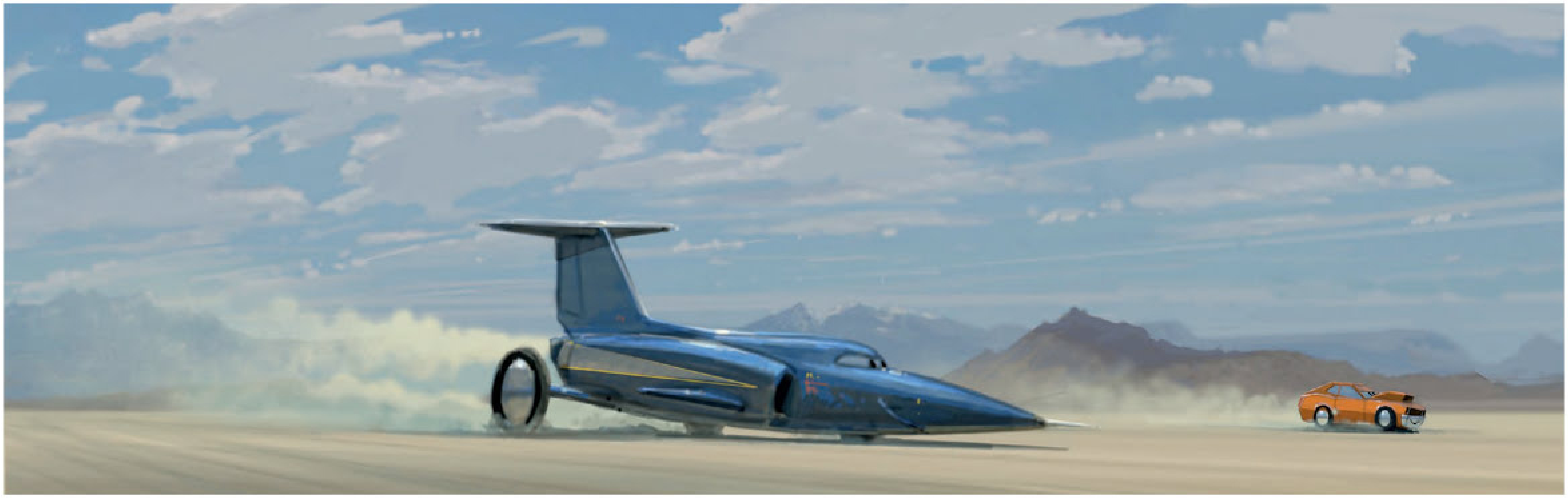


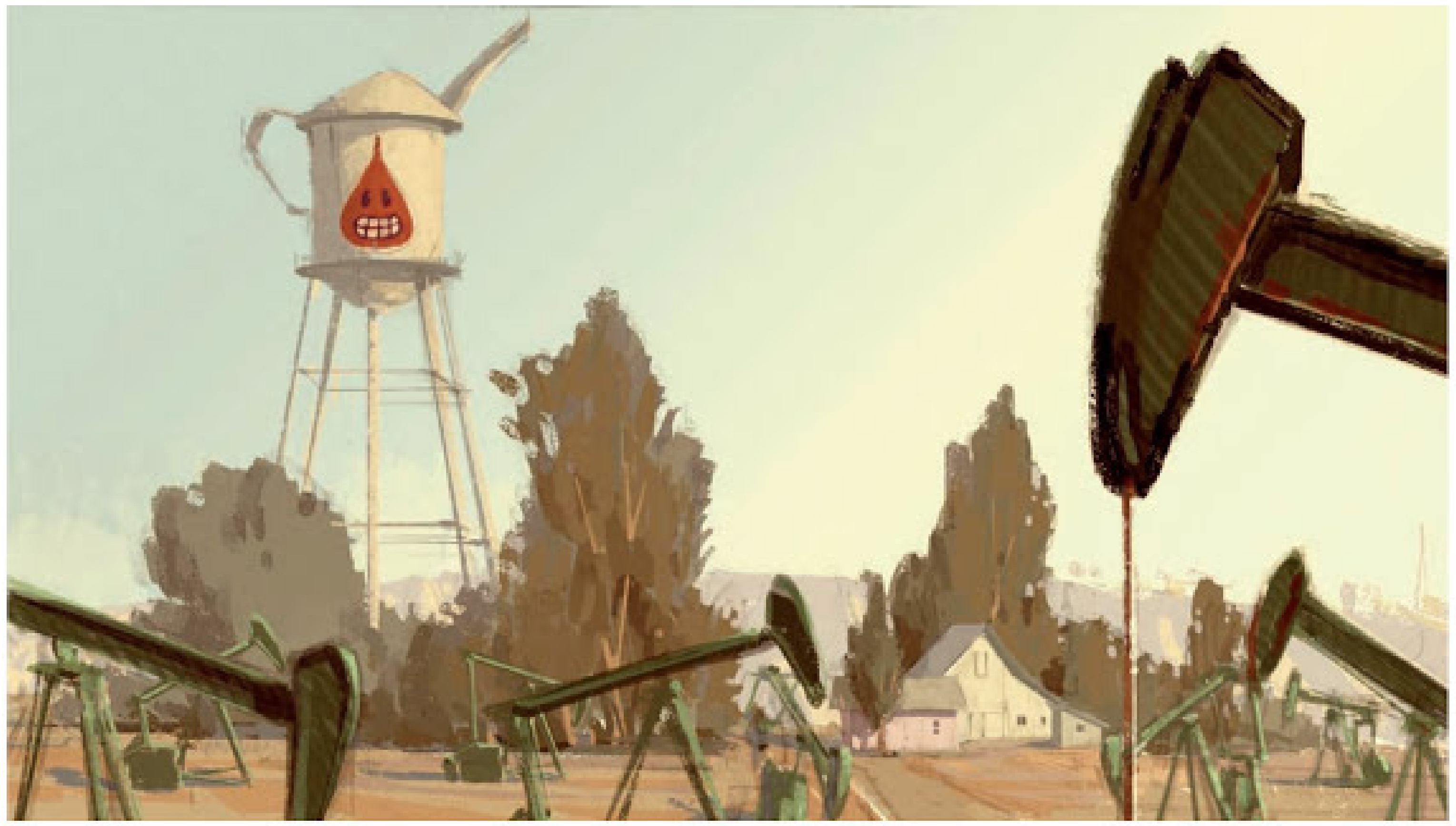


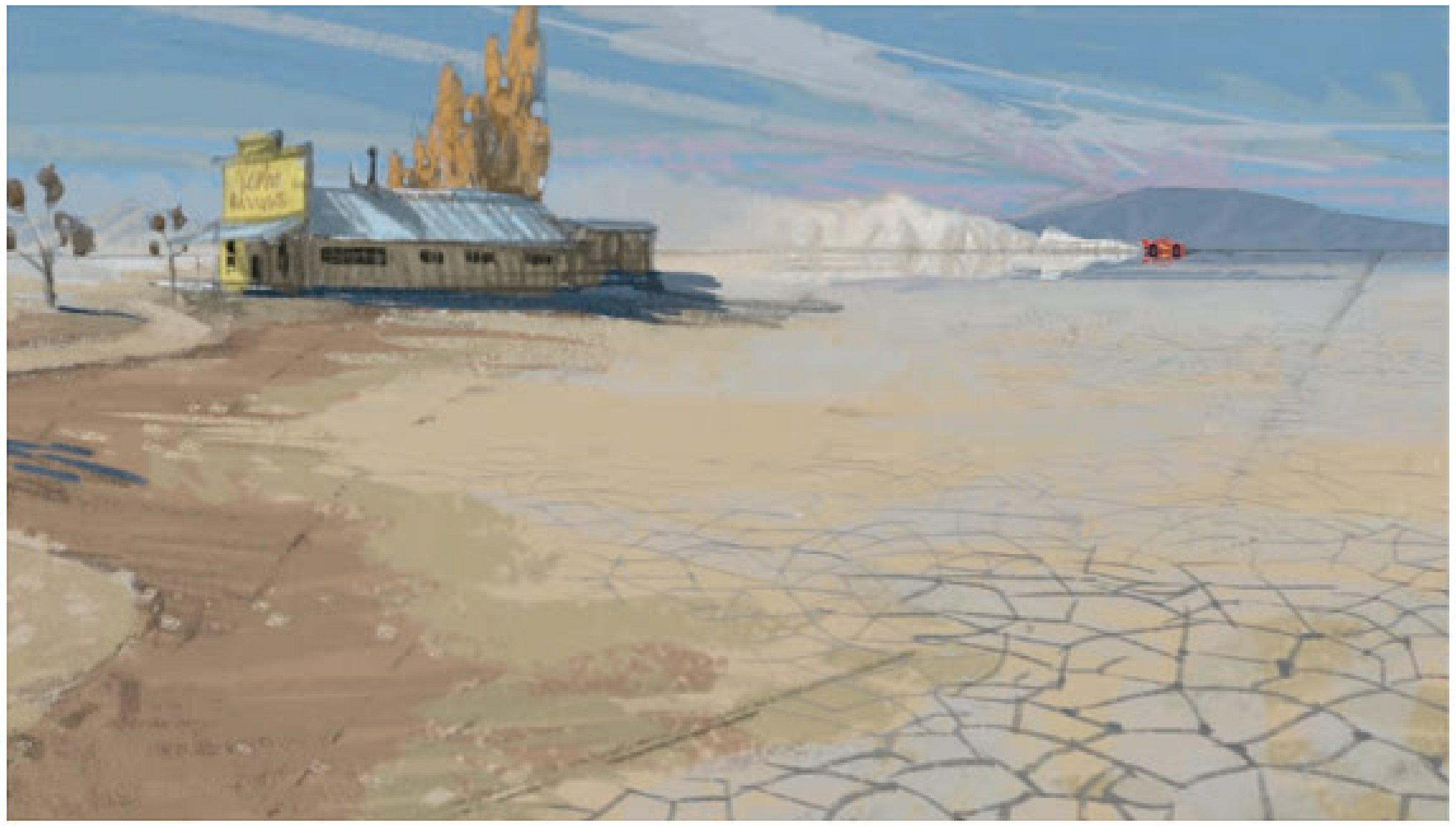


(top) **BILL CONE** Digital; (bottom left) **BILL CONE** Colored pencil on paper, digital touch up; (bottom right) **BILL CONE** Digital; (opposite) **BILL CONE** Digital

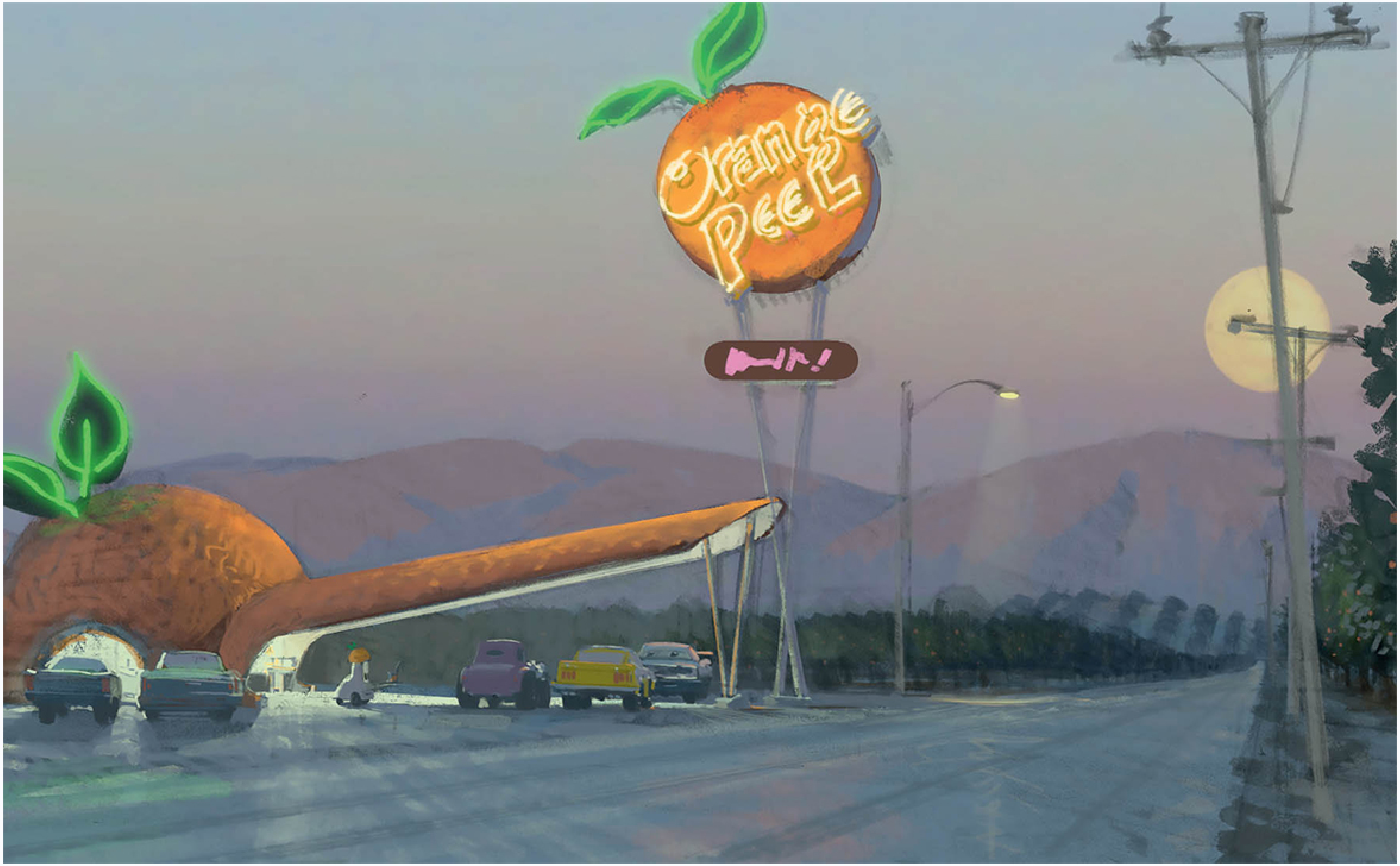


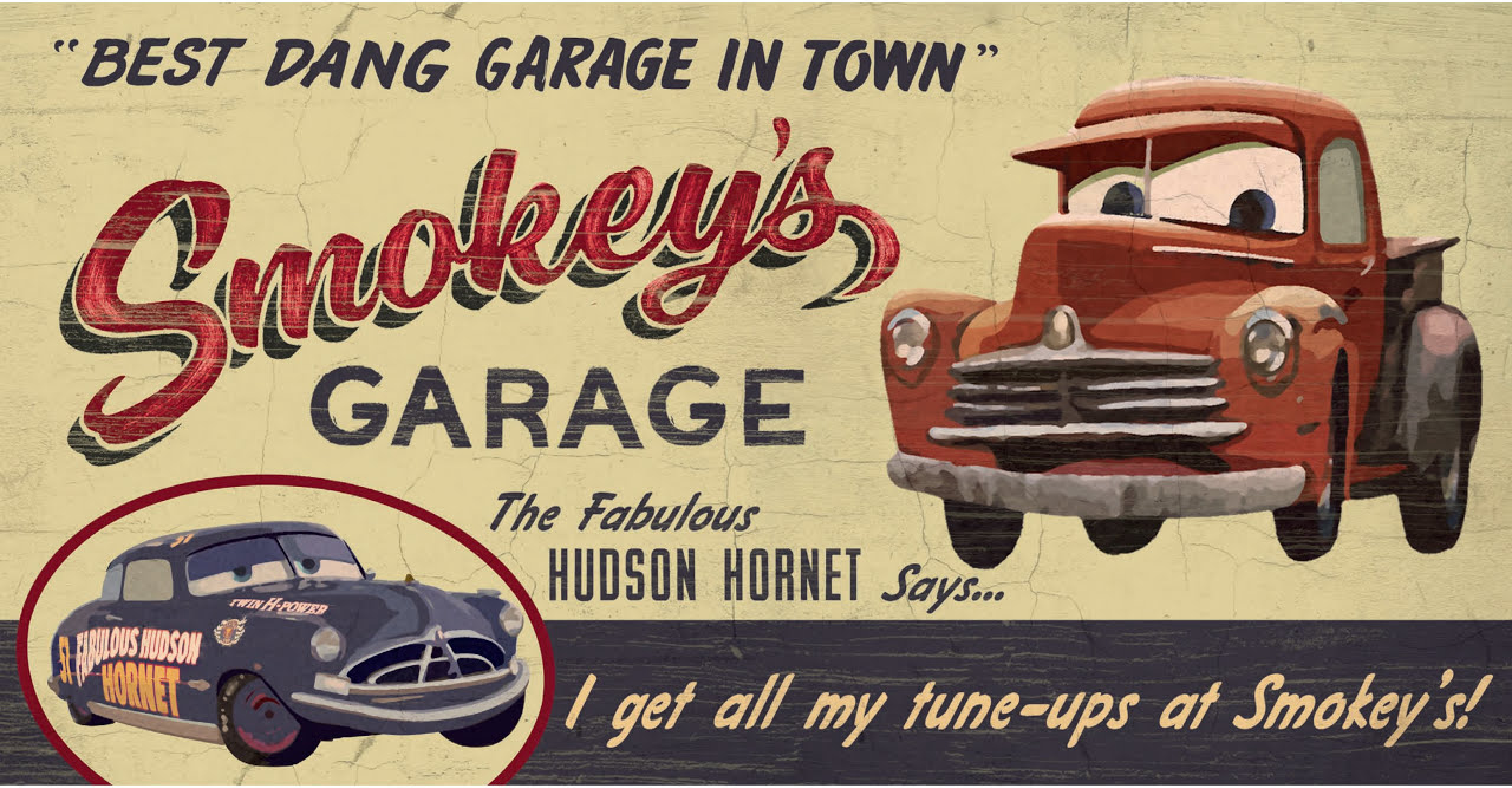






(top) Painting by **BILL CONE**, Design by **BOB PAULEY**; (bottom row) **BILL CONE** Digital;
(opposite) **BILL CONE** Digital


Orange Peel


"BEST DANG GARAGE IN TOWN"
Smokey's
GARAGE
The Fabulous
HUDSON HORNET Says...
I get all my tune-ups at Smokey's!
TWIN H-POWER
51 FABULOUS HUDSON HORNET

JOSH HOLTSCLAW Digital

ACKNOWLEDGMENTS

The journey is the reward . . . and *Cars 3* couldn't have asked for better traveling companions.

Thank you to the folks whose hard work brought *The Art of Cars 3* to life: Molly Jones, Jenny Moussa Spring, Deborah Cichocki, and Shiho Tilley at Pixar Publishing, and Wynn Rankin, Neil Egan, Jessi Rymill, Beth Steiner, Lia Brown, and Pippa White at Chronicle Books.

This book couldn't exist without the incredible creative work of the art and story teams of *Cars 3*:

Production designers Bill Cone and Jay Shuster, art directors Craig Foster, Noah Klocek, and Laura Phillips, and artists Paul Abadilla, Lauren Airriess, Grant Alexander, Bert Berry, Nelson Bohol, Jennifer Chang, Paul Conrad, Dan Holland, Josh Holtsclaw, Catherine Kelly, John Lee, Kyle Macnaughton, Matthew Nolte, Kristian Norelius, Bob Pauley, Jerome Ranft, and Garrett Taylor.

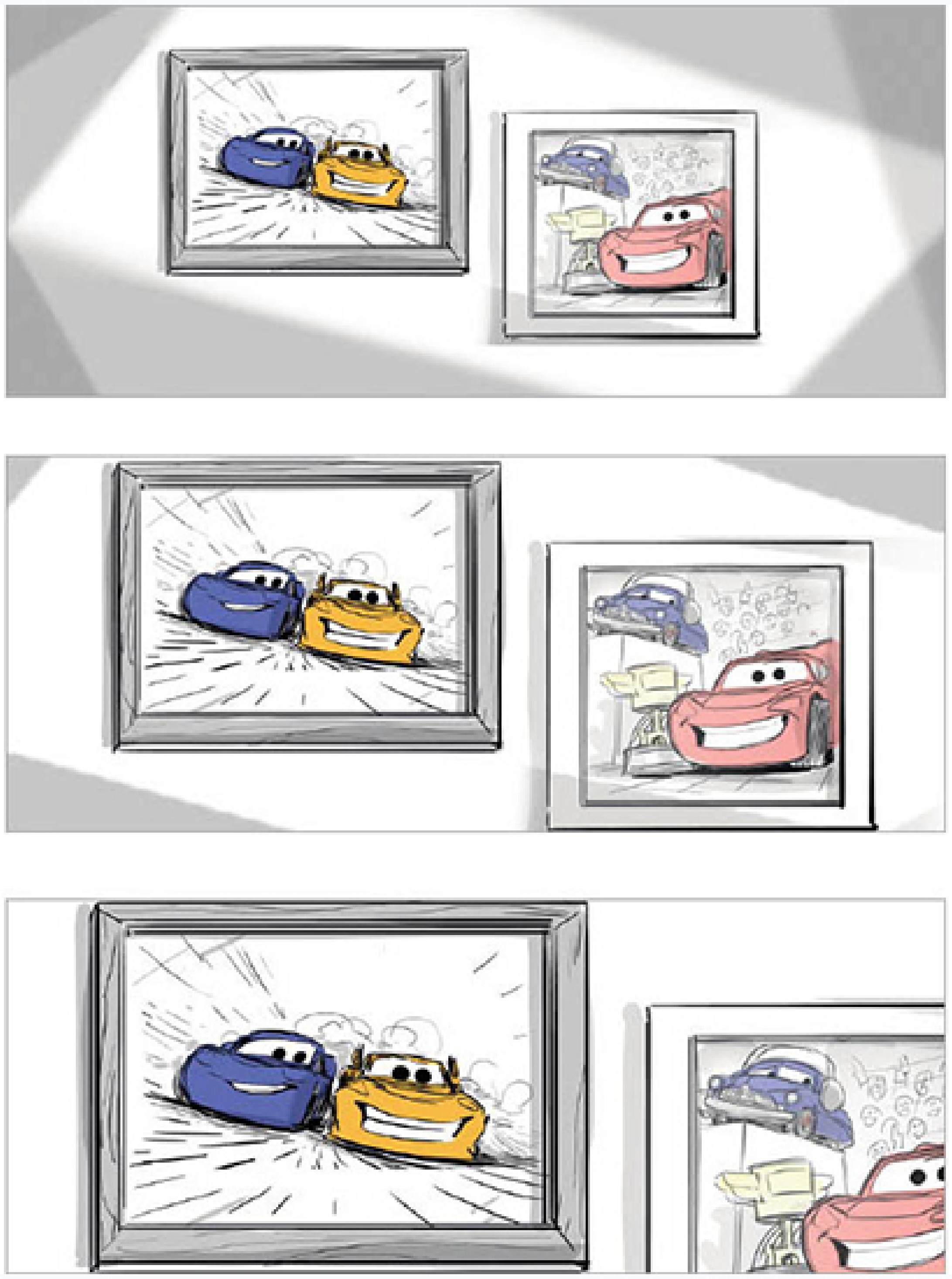
Story supervisor Scott Morse and story artists Rej Bourdages, Mike Daley, Louis Gonzales, John Hoffman, Sam Hood, Kevin O'Brien, Brian Kalin O'Connell, Bob Peterson, Bobby Podesta, Bill Presing, Xavier Riffault, Christian Roman, Tony Rosenast, Garett Sheldrew, Louise Smythe, Jean-Philippe Vine, and Michael Yates.

And this book *wouldn't* exist without the dedicated work of the production folks alongside them: Nick Berry, Biz Thorsen, and Laura Finell in art, Maureen Giblin, Daniel LaPook, Courtney Lockwood, and Jessica Heidt in story, and Margo Zimmerman and Jennifer Ceci in feature relations.

Special thanks to Andrea Warren, Pam Darrow, Jay Ward, Jim Roderick, Jacob Combs, Hannah Eichers, and Jess Walley in the *Cars 3* production office, J Mays, Bryan Wunder for keeping the home fires burning, and, of course, the Pixar executive team: John Lasseter, Ed Catmull, Jim Morris, Marc Greenberg, Jim Kennedy, Steve May, Lori McAdams, Tom Porter, Lindsey Collins, Katherine Sarafian, and Jonas Rivera.

Finally, thank you to the people who made *Cars 3* possible: Our amazing crew, our talented studio colleagues, and our wonderful families, who make it all worthwhile.

—**KEVIN REHER,** Producer



GARETT SHELDREW Pencil

ABOUT THE AUTHORS

JOHN LASSETER is a two-time Academy Award® winner, director, chief creative officer at Walt Disney and Pixar Animation Studios, and principal creative officer at Walt Disney Imagineering. He directed *Toy Story*, *A Bug's Life*, *Toy Story 2*, *Cars*, and *Cars 2*.

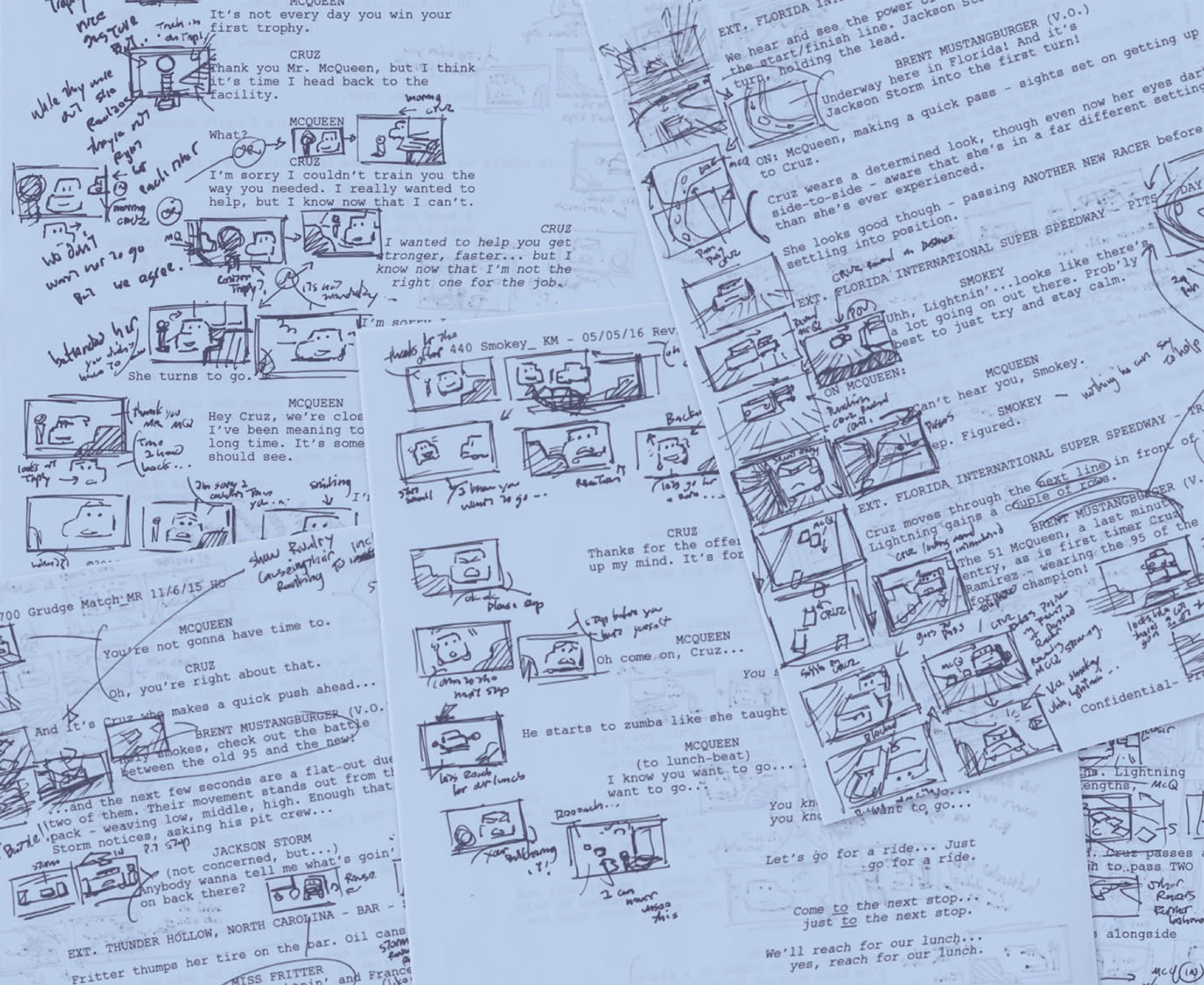
BRIAN FEE, in his 14 years with Pixar, has worked as a story artist on some of the studio's most popular and acclaimed movies, including the *Cars* films, Academy Award®–winning *Ratatouille*, *WALL•E*, and *Monsters University*. Fee makes his directorial debut with *Cars 3*.

BILL CONE began his time at Pixar as a freelancer on *Toy Story*, which led to positions as a production designer on feature films *A Bug's Life*, *Toy Story 2*, and *Cars*, and several short films *Air Mater*, *Time Travel Mater*, and *La Luna*. Most recently he was a production designer on *Cars 3*.

JAY SHUSTER joined Pixar in 2002, working as a character designer on *Cars*, *WALL•E*, and *Cars 2*, and most recently as production designer on *Cars 3*. Raised in Michigan, Shuster studied Industrial Design at the College for Creative Studies in Detroit.

LOUIS GONZALES

MICHAEL YATES



Trophy
while they were out she realizes
Truck in on Trophy
morning Cruz
we didn't want her to go
But we agree.
Custom Trophy?
It's not wanted?
Thank you Mr McQ
Time 2 head back...
looks at Trophy
smiling
Show Rivalry
Thanks for the offer
I know you want to go...
Backs
Battle!
Storm
Raise
Cruz
Blocked
Confidential

MCQUEEN

It's not every day you win your first trophy.

CRUZ

Thank you Mr. McQueen, but I think it's time I head back to the facility.

MCQUEEN

What?

CRUZ

I'm sorry I couldn't train you the way you needed. I really wanted to help, but I know now that I can't.

CRUZ

I wanted to help you get stronger, faster... but I know now that I'm not the right one for the job.

I'm sorry I

She turns to go.

MCQUEEN

Hey Cruz, we're clos

I've been meaning to

long time. It's some

should see.

---

700 Grudge Match_MR 11/6/15 HO

MCQUEEN

You're not gonna have time to.

CRUZ

Oh, you're right about that.

And it's Cruz who makes a quick push ahead...

BRENT MUSTANGBURGER (V.O.)

Holy smokes, check out the battle between the old 95 and the new!

...and the next few seconds are a flat-out due

two of them. Their movement stands out from th

pack - weaving low, middle, high. Enough that

Storm notices, asking his pit crew...

JACKSON STORM

(not concerned, but...)

Anybody wanna tell me what's goin'

on back there?

EXT. THUNDER HOLLOW, NORTH CAROLINA - BAR -

Fritter thumps her tire on the bar. Oil cans

MISS FRITTER

tnin' and France

---

440 Smokey_ KM - 05/05/16 Rev

CRUZ

Thanks for the offer

up my mind. It's for

MCQUEEN

Oh come on, Cruz...

You s

He starts to zumba like she taught

MCQUEEN

(to lunch-beat)

I know you want to go...

want to go...

You kn

you kn

want to go...

Let's go for a ride... Just

go for a ride.

Come to the next stop...

just to the next stop.

We'll reach for our lunch...

yes, reach for our lunch.

EXT. FLORIDA IN

We hear and see the power o

the start/finish line. Jackson St

turn, holding the lead.

BRENT MUSTANGBURGER (V.O.)

Underway here in Florida! And it's Jackson Storm into the first turn!

ON: McQueen, making a quick pass - sights set on getting up to Cruz.

Cruz wears a determined look, though even now her eyes dar

side-to-side - aware that she's in a far different setting

than she's ever experienced.

She looks good though - passing ANOTHER NEW RACER before

settling into position.

EXT. FLORIDA INTERNATIONAL SUPER SPEEDWAY - PITS - DAY

SMOKEY

Uhh, Lightnin'...looks like there's a lot going on out there. Prob'ly best to just try and stay calm.

ON MCQUEEN:

MCQUEEN

Can't hear you, Smokey.

SMOKEY

Yep. Figured.

EXT. FLORIDA INTERNATIONAL SUPER SPEEDWAY - TR

Cruz moves through the next line in front of

Lightning gains a couple of rows.

BRENT MUSTANGBURGER (V.

The 51 McQueen, a last minut

entry, as is first timer Cruz

Ramirez - wearing the 95 of the

former champion!

Confidential- Pr

---

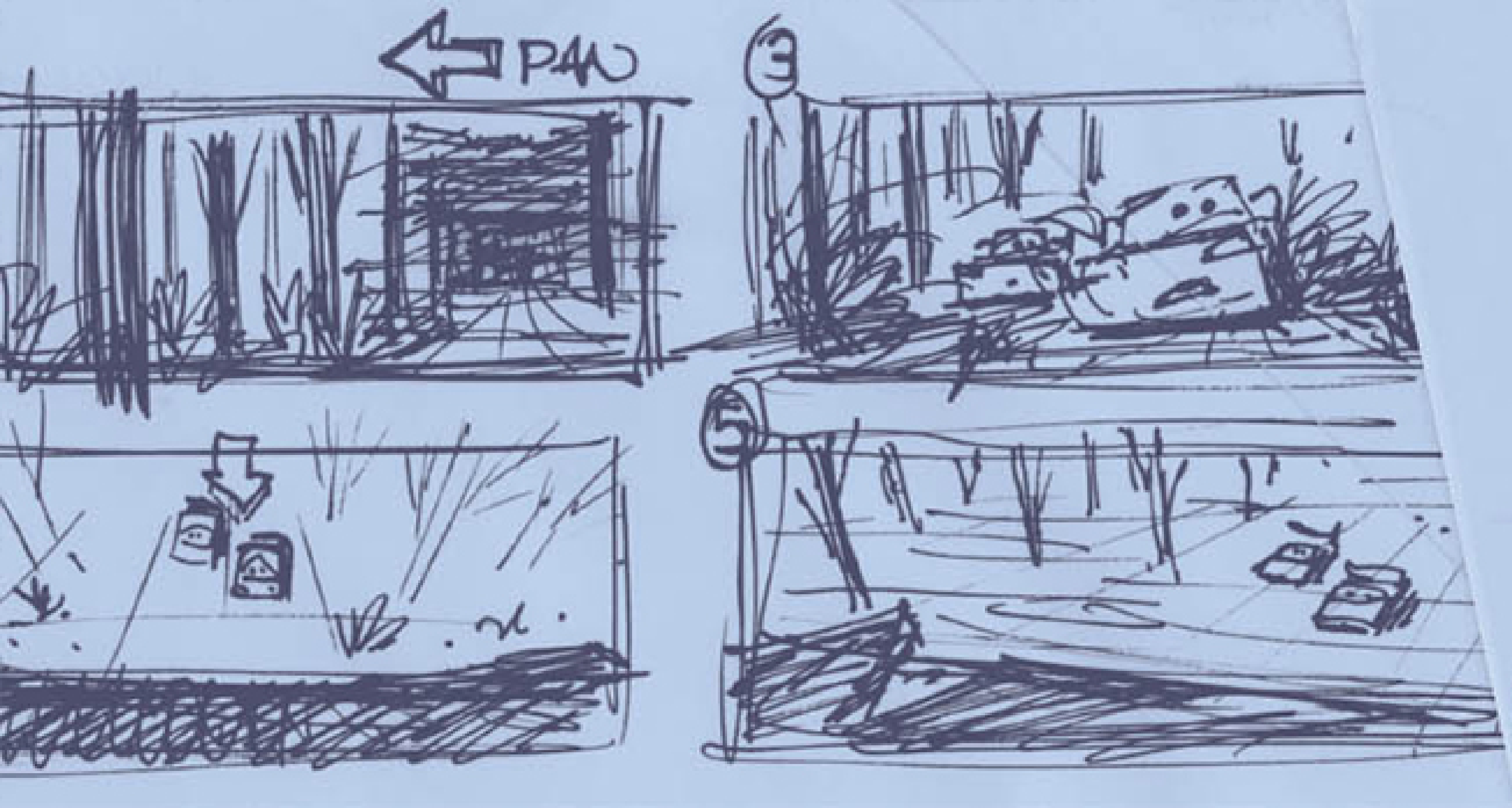
s. Lightning

engths,

Cruz passes a

h to pass TWO

alongside



Cruz ponders this for a long beat. The pit road exit has arrived and...she doesn't take it!

MCQUEEN
Woooo, there's the Maestro I know!! The Maestro of Motivation!! Now let's go get Jackson Storm!!

CRUZ
You'll be with me, old man?

MCQUEEN
Every lap!

The green flag out - the two accelerate forward. YATES

Cut. With Storm. ME

STORM'S CREW CHIEF (O.S.)
Do you see 'em?

STORM
Who?

STORM'S CREW CHIEF (O.S.)
McQueen and Cruz!

STORM
No!

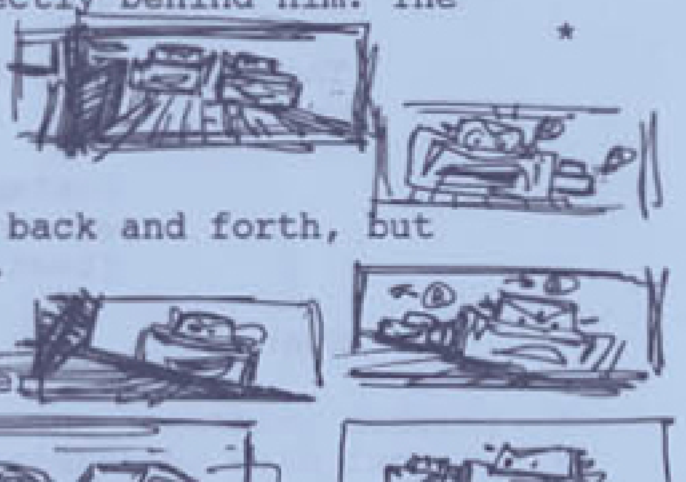
STORM'S CREW CHIEF
Well check your rear view mirror!

Storm checks his mirror ? and is shocked to realize that McQueen and Cruz are both drafting directly behind him! The order is Storm, McQueen, Cruz. *

STORM
What?!

Storm tries evasive maneuvers, veering back and forth, but McQueen and Cruz stay right behind him.

MCQUEEN
Like two June bugs on a summer night! Well, ~~three actually.~~



---

440 Smokey_ KM

CRUZ
This is it?

MCQUEEN
(reverent)
This is it. Where he got his start.

MCQUEEN
This is where Doc got his start.

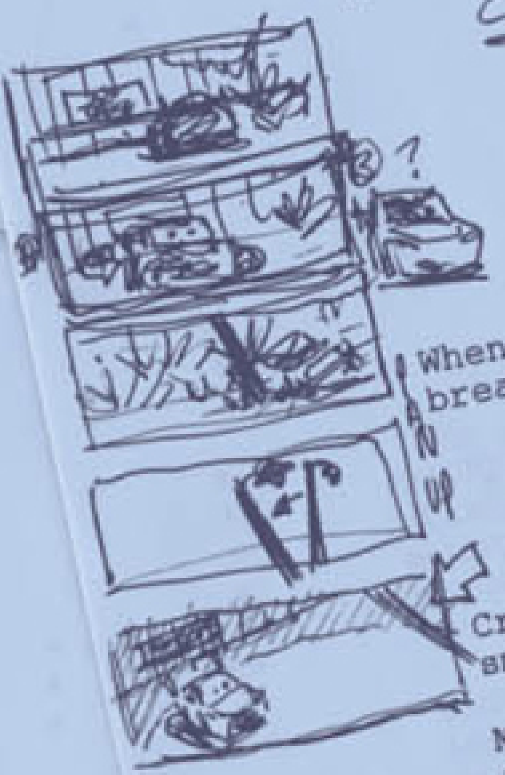
CRUZ
It's locked.

McQueen sees what she sees -- an iron gate, locked up tight with a big padlock and a NO TRESPASSING sign.

CHAINS

CRUZ
Sorry Mr. McQueen.
(realizes he's not there)
Mr. McQueen?

CRUZ
What a shame, we came all this way... Mr. McQueen?



When she looks back, McQueen is ramming a broken light po
breaking it loose...

MCQUEEN
Oh we're going in

Cruz jumps out of the way just before the pos
smashing the gate with a very LOUD CLATTER.

McQueen rolls through the gate past Cruz, wh
and they head quietly into the tunnel.

RADIC
INDY INT

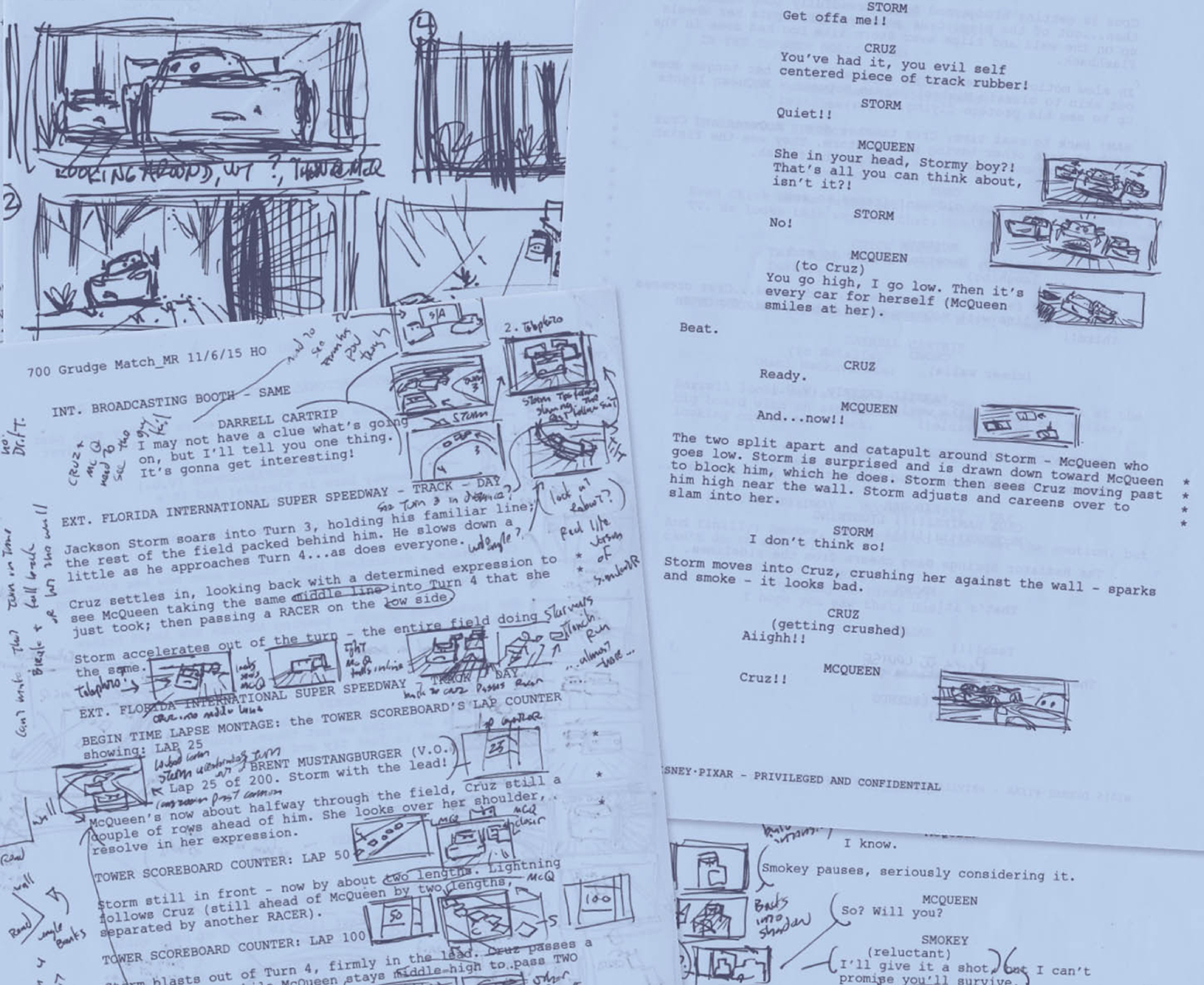
INT. DOC'S OLD TRACK - CONTINUOUS

McQueen is the first to emerge. He has ente
sacred halls of the church of Doc and he kn
at the edge of the track, breathing it in.
puddles, weeds, or broken grandstands, all
track in its glorious heyday.

Without saying a word, McQueen moves slowl
then stops - looking up at something we ca

CRUZ (O.S.) (CONT'D)
Whoa.

©2016 DISNEY·PIXAR - PRIVILEGED AND CONFIDENTIAL


LOOKING AROUND, WT ?, THEN @ McQ
②

700 Grudge Match_MR 11/6/15 HO

INT. BROADCASTING BOOTH - SAME

DARRELL CARTRIP
I may not have a clue what's going on, but I'll tell you one thing. It's gonna get interesting!

EXT. FLORIDA INTERNATIONAL SUPER SPEEDWAY - TRACK - DAY

Jackson Storm soars into Turn 3, holding his familiar line; the rest of the field packed behind him. He slows down a little as he approaches Turn 4...as does everyone. *

Cruz settles in, looking back with a determined expression to see McQueen taking the same middle line into Turn 4 that she just took; then passing a RACER on the low side. *

Storm accelerates out of the turn - the entire field doing the same.

~~EXT. FLORIDA INTERNATIONAL SUPER SPEEDWAY - TRACK - DAY~~

EXT. FLORIDA INTERNATIONAL SUPER SPEEDWAY - THE TOWER SCOREBOARD'S LAP COUNTER

BEGIN TIME LAPSE MONTAGE: the TOWER SCOREBOARD'S LAP COUNTER showing: LAP 25 *

BRENT MUSTANGBURGER (V.O.)
Lap 25 of 200. Storm with the lead! *

McQueen's now about halfway through the field, Cruz still a couple of rows ahead of him. She looks over her shoulder, resolve in her expression. *

TOWER SCOREBOARD COUNTER: LAP 50

Storm still in front - now by about two lengths. Lightning McQueen follows Cruz (still ahead of McQueen by two lengths, separated by another RACER).

TOWER SCOREBOARD COUNTER: LAP 100

Storm blasts out of Turn 4, firmly in the lead. Cruz passes a

ile McQueen stays ~~middle-high~~ to pass TWO

need to see them by Turn 4
TV
S/A
2. Telephoto
Storm
Storm Tipped / Slowing / Rest follows suit
Tilt
No: Dr.F.T.
CRUZ + McQ need to see
See Turn 3 in distance?
look at Labour?
wide angle?
Red lite version of Simulator
Turn in Turn / Brake + fall back / & let them wall
Can't make that
doing Starwars / Trench Run
Tight McQ looks inline
...almost there...
Telephoto →
looks back, McQ
back to Cruz passes Racer
Cruz, no middle lane
lap counter
locked camera / Storm w/ leading turn
compression past camera
wall
McQ
McQ closer
McQ
50
100
S
C
wall
Road
Road
angle Banks

STORM
Get offa me!!

CRUZ
You've had it, you evil self centered piece of track rubber!

STORM
Quiet!!

MCQUEEN
She in your head, Stormy boy?! That's all you can think about, isn't it?!

STORM
No!

MCQUEEN
(to Cruz)
You go high, I go low. Then it's every car for herself (McQueen smiles at her).

Beat.

CRUZ
Ready.

MCQUEEN
And...now!!

The two split apart and catapult around Storm - McQueen who goes low. Storm is surprised and is drawn down toward McQueen to block him, which he does. Storm then sees Cruz moving past him high near the wall. Storm adjusts and careens over to slam into her. * * * *

STORM
I don't think so!

Storm moves into Cruz, crushing her against the wall - sparks and smoke - it looks bad.

CRUZ
(getting crushed)
Aiighh!!

MCQUEEN
Cruz!!

I know.

Smokey pauses, seriously considering it.

MCQUEEN
So? Will you?

SMOKEY
(reluctant)
I'll give it a shot, ~~but~~ I can't promise you'll survive.

Backs into shadow